

Kinco DTools Pro Configuration editing software

User Manual

This manual is suitable for the Green series and Future series products Please read this manual carefully before using this product To ensure proper use of the product



First of all, thank you for choosing GREEN Series and FUTURE Series products!

Before using Green series and Future series products, please read this manual carefully and use the products properly based on full understanding to ensure the safety of relevant persons and equipment.

About this manual

This manual is written mainly for the use and design of Kinco DToolsPro configuration editing software (later referred to as "DTP"). The manual is available in both physical and electronic versions. The electronic version is included in the Kinco DToolsPro installation package and can be opened in the software 'Help' menu or through the 'Help' button in the component properties after the software is installed; Alternatively, it can be downloaded for free from the official Kinco website at https://en.kinco.cn/. Users who need a physical manual can contact their local product distributor to purchase one.



This manual may not be updated in time due to product improvement or other reasons. To ensure that product specifications and accessories are available in a timely and correct manner, we recommend that users pay attention to the information published on the official website of Kinco. Therefore, we do not notice the manual updates and software updates.

Scope of use

This manual provides operating instructions for Kinco DToolsPro to accompany the development of related products.

Suitable persons

This manual can be used as a reference for those who use the GREEN series and FUTURE series products manufactured by Kinco and have basic knowledge in the field of automation engineering and have experience with PCs using Microsoft related operating systems. If necessary, it can also be used as a reference for users, commissioning engineers, service technicians and maintenance technicians who have knowledge and ability to program in C language.

Symbols and terminology

• Safety symbols and terminology



Danger

Indicates that serious personal injury or even death will result if appropriate care is not taken.



Warning

Indicates that serious personal injury or even death will result if appropriate care is not taken.



Caution

Indicates that minor personal injury may result if appropriate care is not taken.



Attention

Indicates that an undesired result or state may occur if the corresponding prompt is not heeded.

Prohibition

Indicates relevant commands, processes or disassembly actions that are prohibited to ensure proper use of the product.

General information symbols and terminology



Provides tips or additional information on the proper use of the product.



Indicates the links to related information in other manuals.



Indicates the items with explanatory, descriptive, footnotes.



Indicates suggestive content.

Indicates the links to related information in this manual.

• Terminology

The terms used in this manual have the following meanings:

Terminology in this manual	Meaning
Kinco DToolsPro	Indicates the tool software for the Green Series and Future Series products manufactured by Kinco: Kinco DToolsPro configuration editing software.
HMI	Indicates Green Series and Future Series products manufactured by Kinco.
PLC	Programmable Logic Controller
PC	Personal Computer
External Storage Device	Indicates the standard USB memory device or SD card supported by the Green Series and Future Series products manufactured by Kinco.

> The following terms are distinct from formal trade names and trademarks:

Terminology in this manual	Formal trade names/trademarks:
Windows 7	Microsoft® Windows® 7 Operating System
Windows 8	Microsoft® Windows® 8 Operating System
Windows 10	Microsoft® Windows® 10 Operating System
Windows Server 2003	Microsoft® Windows Server® 2003 Operating System
Windows11	Microsoft® Windows® 11 Operating System

 \succ The following terms are used when describing basic mouse operations

Terminology	Procedure	Illustrations
Left Click	Without moving the mouse, press the left mouse button and release.	

Right Click	Without moving the mouse, press the right mouse button and release.	N
Double Click	Without moving the mouse, quickly press the mouse twice. This operation is valid only for the left mouse button.	
Dragging	Move the mouse while holding down the left button and release the left button at the target position.	
Hovering	Move the mouse to the specified position and pause.	
Input	Press the left mouse button in the input box, release it, and after the cursor blinks, type the text content from the keyboard.	A
Operation	Click, right-click or double-click on a blank space with the mouse	

Product Support

• Technical Service Line

If you have questions during product selection or use, you can contact our technical staff by calling our technical service hotline: **400-700-5281**.

• Agents & Offices

If you have any questions about the products described in this manual, please contact your local Kinco Automation office and agent. For information on user training, please visit the company's website for relevant content or contact your local agent directly for training programs.

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Catalog

Preface1
1 Overview
1.1 Software Overview
1.2 Software Installation1
1.2.1 Installation of Kinco DToolsPro1
1.2.2 Uninstallation of Kinco DToolsPro
2 Getting Started
2.1 Interface layout
2.2 Project Configuration
2.2.1 Create Project
2.2.2 Connect external controllers
2.2.3 Create new variable
2.2.4 Configuration screen
2.3 Offline Simulation
2.4 Download the project10
2.4.1 Download project using computer10
2.4.2 Download project using USB flash drive11
2.5 Upload14
2.6 Decompile
3 Basic Operations
3.1 Multiple replication17
3.2 Common Property17
3.2.1 Border property18
3.2.2 Fill Property19
3.2.3 Shadow Property19
3.2.4 Translucent Property19
3.2.5 Arrow Property20
3.2.6 Label Data20
3.2.7 Font Property20
3.2.8 Walking Lantern21
3.2.9 Touching Enabled Set22
3.2.10 Display Set23
3.3 Batch Modify23
3.3.1 Convert variable24
3.3.2 Change Label/TextLib25
3.3.3 Touching Enabled Set
3.3.4 Display Set
3.4 Find/Replace
3.4.1 Find/Replace Variable
3.4.2 Find/Replace Text

	3.4.3 Find/Replace Macro	
3.5	Find in element range	
3.6	5 Variable cross search	
4 Systen	n Set	
-	HMI Set	
4.2	2 Global Set	
	4.2.1 Backlight and screensaver	
	4.2.2 Language Setting	40
	4.2.3 Input Method Set	41
	4.2.4 Touch tone and System Prompt	41
	4.2.5 Window	42
4.3	3 Project Set	42
	4.3.1 Item state graphic miss	42
	4.3.2 Use USB Default Input	42
4.4	Clock Set	43
4.5	5 HMI Authorize	43
4.6	Global Inter Lock	44
5 Variat	ole	47
5.1	System Variable	47
5.2	2 External Variable	47
5.3	3 Internal variable	48
5.4	Pointer Variable	48
5.5	5 Structual Variable	50
5.6	o Variable Group	51
5.7	′ Data Type	52
5.8	Addition/deletion/use of variables	53
	5.8.1 Adding variables	53
	5.8.2 Deleting Variables	53
	5.8.3 Export/import variable	54
6 Com	munication Connection	55
6.1	Equipment management	55
6.2	2 COM	55
6.3	Bethernet port	60
6.4	4 USB	61
7 Windo	ow Screen	63
7.1	Types of windows	63
7.2	2 Start Page Settings	63
7.3	3 System Window	64
7.4	Editing Window	65
	7.4.1 Create a new window	65
	7.4.2 Open Window	66
	7.4.3 Copy the Window/ Batch Copy Windows	67
	7.4.4 Delete the window/ Batch delete windows	68
	7.4.4 Delete the window/ batch delete windows.	

7.5 Window Properties	70
7.5.1 Open the Window Properties Page	70
7.5.2 Description of window property	71
8 Elements (Components)	73
8.1 Public settings	73
8.1.1 Creation and deletion of elements	73
8.1.2 Execution order of elements	73
8.1.3 The way to open the property	74
8.1.4 Set switch functions	74
8.1.5 Lamp set function	75
8.1.6 Label	76
8.1.7 Graphics Setting	76
8.1.8 Operating condition setting	77
8.1.9 Display Set	79
8.2 Plot	79
8.3 Switch/Light	82
8.3.1 Switch Function	82
8.3.2 Lamp Set	96
8.3.3 Switch Operation	99
8.4 Data display	101
8.5 Alarm browsing	105
8.5.1 Alarm Bar	105
8.5.2 Current Alarm	107
8.5.3 Alarm History	110
8.5.4 Alarm Statistic	113
8.6 Chart	116
8.6.1 Trend	116
8.6.2 XY CHart	120
8.6.3 Meter	124
8.6.4 Bar Chart	127
8.6.5 Pipe	130
8.7 Information	132
8.7.1 Communication	132
8.7.2 User	133
8.7.3 Database table	137
8.7.4 History data	143
8.7.5 Recipe	147
8.7.6 Event	153
8.7.7 I/O	157
8.8 File	162
8.8.1Flile List	162
8.8.2 File In/Out	162
8.8.3 FTP	162
8.8.4 Browse File	162

8.8.5 Browse PDF File	163
8.9 Other	164
8.9.1Time	164
8.9.2 Window	168
8.9.3 QR code	170
9 IOT	172
9.1 VNC	172
9.2 Independent Desktop	173
9.3 MQTT	175
9.4 FTP	178
10 Database	180
10.1 Net Database	180
11 User Security	182
11.1 Security Settings	182
11.1.1 Group Name List	182
11.1.2 Password Setting	183
11.1.3 Lock Setting	183
11.1.4 Swiping Setting	183
11.1.5 Group Authority Setting	184
11.2 User Setting	184
11.2.1 User Name List	184
11.2.2 User Authority Information	185
11.3 User Variable	186
11.3.1 Current User Variable	186
11.3.2 Set Relevant User Variable	186
11.4 User Window	187
11.4.1 User Authority Browse	187
11.4.2 User Property Configuration	187
11.4.3 User Password Modification	188
11.4.4 User Authority Login	188
11.5 User Operation	188
11.5.1 Introduction to Operation	188
11.5.2 Introduction to Function	189
12 Task Schedule	190
12.1 Schedule Set	190
12.2 Action Set	
12.3 Enable Set	193
13 Global Control	194
13.1 Operation Panel(GlobalControl)	
13.2 Trigger Set	
13.3 Action Set	
13.4 Enable Set	
14 Alarm/Event	
14.1 Alarm Set	198

14.2 Monitor and Record	202
14.3 Alarm Information Table	203
15 Sample	212
15.1 Basic	212
15.2 Channel	214
15.3 Export	214
15.3.1 Export property settings	214
15.3.2 Export Channel Settings	215
15.4 Condition	216
16 Macro Instruction	217
16.1 Macro Instruction Syntax	217
16.2 Device Communication Function	220
16.3 Macro Instruction Execution	223
16.4 Macro Instruction Examples	223
17 Recipe	225
17.1 Introduction to Recipe	225
17.2 Recipe Setting	225
18 Operation Log	228
18.1 Enable Operation Log	228
18.2 Export Record	
18.3 Operation Log Display	230
19 Electronic Signature	232
20 Resource Library	235
20.1 Text Library	235
20.3 Language Library	236
20.4 Image Library	236
20.5 Multimedia	237
20.5.1 Sound	237
20.5.2 Animation	238
20.5.3 Video	238
20.5.4 PDF	238
20.6 Template Library	238
20.6.1 Introduction to Template Library	
20.6.2 Template Library Setting	
20.6.3 Template library instance demonstration	

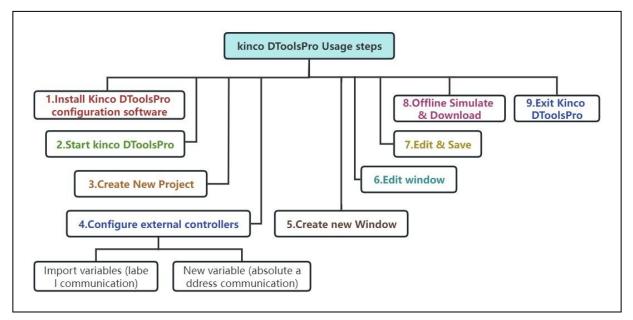
1 Overview

This chapter introduces the installation and uninstallation of Kinco DToolsPro configuration editing software.

1.1 Software Overview

Kinco DToolsPro configuration editing software (hereinafter referred to as "DTP") is a special HMI configuration editing software developed by Kinco Automation (Shanghai) Co.,Ltd (referred to as "Kinco") for the Green Series and Future Series. The software provides a powerful integrated development environment for users. The products are widely used in various fields such as medical, chemical, electric power, printing, textile, food, national defense and engineering machinery, smart home, high-speed railroad, etc.

The steps for using Kinco DToolsPro are shown in the figure below:



1.2 Software Installation

1.2.1 Installation of Kinco DToolsPro

Take the simplified Chinese installation interface process as an example, the steps are as follows:

Double-click the "Setup.exe" file to run the installer.

O Go to the welcome screen

2 Select the language of the installation interface.

Select the installation directory, the software is installed to the root directory of "C:\" by default, and the "Kinco" folder is automatically created in the directory. If you want to customize the installation directory, click [Browse] to change the installation directory.



Confirm installation

The software will give you an indication of Kinco DToolsPro's installation status, click [Install] to enter the software installation process.

6 Successful installation

If the software is successfully installed, it will give a prompt that the installation is complete. Click [Finish] and the software installation is complete.

After the installation is complete, Kinco DToolsPro will create a complete startup directory in the [Start] menu, and Kinco DToolsPro (integrated environment) will be created on the operating system desktop.

During the above installation process, users can click [Cancel] to exit the installation. Please close your computer's firewall and anti-virus software before installation to avoid unsuccessful installation or subsequent use of the software features have defects.

1.2.2 Uninstallation of Kinco DToolsPro

Please exit the Kinco DToolsPro software before performing the uninstall.

• Launch the uninstaller

Method 1: Uninstall from the [Start] menu.

$[Start] \rightarrow [All Programs] \rightarrow [Kinco] \rightarrow [Kinco DToolsPro] \rightarrow [Uninstall]$

Method 2: [Control Panel] \rightarrow Uninstall from [Add or Remove programs]

2 Uninstallation process

Check "Remove", click [Next] to enter the uninstallation process. Among them:

Modification	Advanced users, customize new function to be added or select installed function to be removed.	
	Select this option to perform maintenance on the software.	
Restoration	on Reinstall the Kinco DToolsPro program.	
	Select this option for software maintenance and updates.	
Remove	Uninstall the Kinco DToolsPro program.	



If there are additional files or folders in the Kinco DToolsPro installation directory, please delete them manually after the software has been uninstalled

2 Getting Started

Project tree Template Library

+ 100% -

Apply to global -

2.1 Interface layout

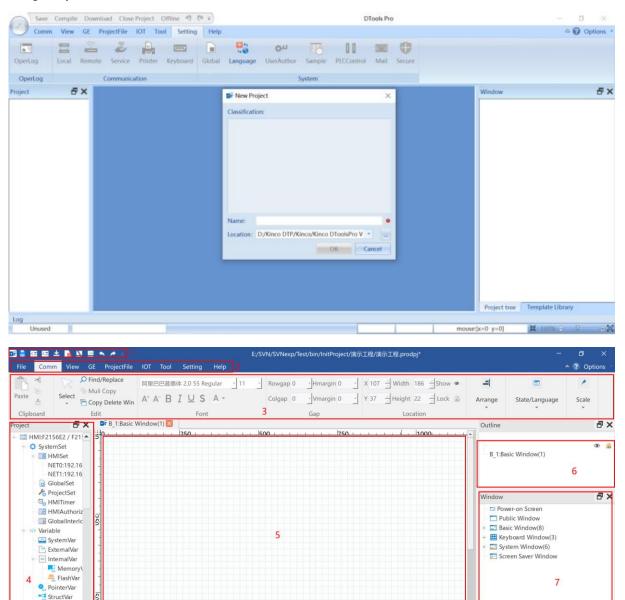
VariableGrou

8

Double click to run into DTP software, users can see "New" and "Open other file", click "New" will pop up the new project

.....

dialog box, you can follow the instructions to enter the DTP interface.



	Interface layout description		
1)	Shortcut toolbar	To customize shortcut tools: 'New', 'Open', 'Save', 'Compile', 'Download' etc.	
2)	Menu bar	Common, View, GE, Tool etc.	
3)	Toolbar	Switch the detailed toolbar according to the actual menu selection.	
4)	Project Tree	Functional organization tree of the project including communication alarm, recipe,	

mouse:[x=952 y=566]

		Macro, variable etc.
5)	Screen editing area	Editing screen
6)	Window Details	Display detailed space information of the current page.
7)	Window	Display all current windows, create new windows, rename and delete windows.
8)	Output information	Display output project compilation details

Click "File" in the menu bar to enter the file management interface;

Start New Project Close Project	Good afternoon • New Project 2 Dia blue gr	more style →
 Save Save As Compile Project Protection 	Recent Project E/SVN/SVNexp/Test/bin/InitProject/13/13.prodpj E/SVN/SVNexp/Test/bin/InitProject/07/67.prodpj E/SVN/SVNexp/Test/bin/InitProject/07/67.prodpj E/SVN/SVNexp/Test/bin/InitProject/12/12.prodpj 3 E/SVN/SVNexp/Test/bin/InitProject/11.prodpj 3 E/SVN/SVNexp/Test/bin/InitProject/11.prodpj 3 E/SVN/SVNexp/Test/bin/InitProject/11.prodpj 3 E/SVN/SVNexp/Test/bin/InitProject/2012/233/333.prodpj E/SVN/SVNexp/Test/bin/InitProject/2012/233/333.prodpj E/SVN/SVNexp/Test/bin/InitProject/2012/20312.prodpj 5 E/SVN/SVNexp/Test/bin/InitProject/2012/20312.prodpj 6	Dpen Other Project

Document Management Interface Layout Description

	New, open, close, save, save as, compile all projects, etc.						
		You can set the password to open the project, and you need to input the set password when you open the project next time; Note: the project will not be opened if the password is forgotten.					
		D Engineering protection password setting X					
		Create engineering protection password					
1) Left toolbar	Project Protection	Create password : ***** 5					
		Cancel Ok					
		Enter the creation password and the confirmation password, both passwords need to be consistent, click on OK					
		Steps to change the project password are the same as above, enter the old password to enter the password change interface					
2) Template style	New projects	s can choose from 3 color template styles					
3)Recently opened project list		Displays the project paths of the 10 most recently opened projects, making it easy for users to quickly open projects.					
4) Open other projects	For opening	projects in other paths					

2.2 Project Configuration

Here we will briefly introduce the steps of the configuration project by creating the "button self-addition" example.

2.2.1 Create Project

Double-click	the	DToolsPro	software	icon	on	the	desktop	Kinco DToolsPro	,	Click	"New	project"	,	as
follows:														

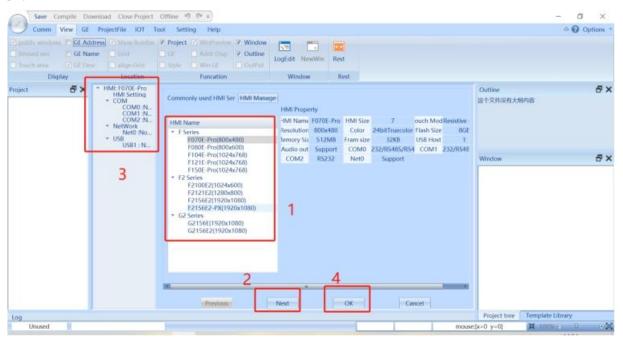
57

5ave	Compile	Download Clor	se Project Offli	ne ") (* =)				DT	lools Pro					л ×
Comm	View	GE ProjectFile	IOT Tool	Setting Hel	a).								- (Options *
Opertog	Local	Remote Service	No. of Lot of Lo	yboard Globa	Eanguage	O-U UserAuthor	Sample	PLCControl	Mail	Secure				
OperLog		Communi	ication				System							
Project	5	×			DF New Pro	iject.		_	×			Window		e ×
					Classificatio	onc								
Log					Name: Location:	D:/Kinco DTP/#		oToolsPro V →	and the second			Project tree	Template Library	
Unused	: II		1								mou	se:[x=0 y=0]	X 100% O	J (* 10

Enter the project name and select the project storage path, the default path is the software root directory "InitProject" folder, click confirm to enter the project configuration.

- (1) Select the HMI model.
- (2) Click "Next" to configure according to the navigation.
- (3) You can choose COM, network port, USB for configuration directly without clicking next.
- (4) Click "Confirm" to enter the project editing screen when the configuration is finished.
- (5) After selecting the correct HMI model, you can also click "Confirm" directly, the COM and network port can be set in the

project, this time to connect the "Modbus TCP" slave.



2.2.2 Connect external controllers

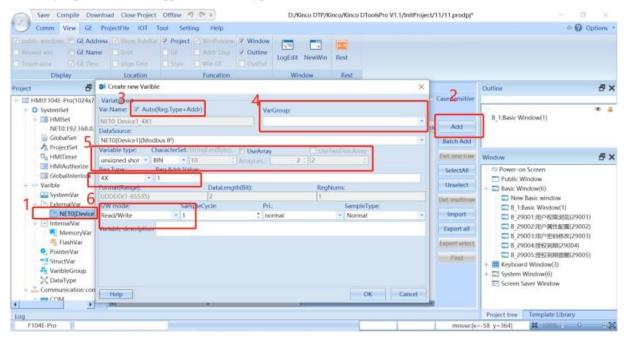
1. Project tree, select "Ethernet" - "Net 0", click "Add", select "Modbus IP "driver. Set the IP address and port number of the

device, a	nd then	click	"OK".
-----------	---------	-------	-------

Save Compile Dow	load Close Project Offline	4) (° 4		D:/Kinco DTP/Kinco/Kinco	DToolsPro V1.1/InitProject/11/11.pr	rodpj*	- 0	×
Comm View GE	ProjectFile IOT Tool Se	tting Help					4 🕜 Op	tions *
C public endows C GE Addr Researd win C GE Nam Touch ann C GE Nam Display Project C X	Location	Adult Dev Win Of Funcation	Di Communi	ication connection	services(HMI is stant) D. External of	celices :		đΧ
PointerVar StructVar StructVar VaribleGroup XolaType Communication con COM	Protocol/Device Name		Param Communica TCP	ationType *	Support Devices Modbus Compatible External	Device Manage	: Window(1)	* *
COM0 -Not L COM1 -Not L COM1 -Not L COM2 -Not L COM2 -Not Us Not COM2 -Not Us - VSB - VSB - VSB - VSB - VSB - VSB - VSB		2	Default Number of c Controller se lumbr Contr 1 De	controllers/PLC allowed 255 ettings roller Name Sett evice1 192.168.0.101;Stat	Add Controller]	r-on Screen c Window Window(6) ew Basic window 1:Basic Window(1) 29001 用户を研究社会(29001) 29002 用声 御母後数(29002) 29003 用声登明修教(29003)	₽×
Remore Access Remore	Add			3	OK Cancel	Project tr	2900年代2月11日29004 29005 建化3月11日第一(2005) oard Window(3) m Window(6) m Saver Window e Template Library 算 1006 0 日	- 00

2.2.3 Create new variable

1. Click "External Variables", double-click "Device 1", select "Add", automatically generate variables by default, set variable group name (can be skipped), select data type, set data address, confirm it is correct, then click "OK".



2.2.4 Configuration screen

1. Double click "Basic Window 1", the following screen will be displayed, click "GE" in the menu bar, select "Set" and then choose "Word set".

Save Compile Downloa	d Close Project Offline 🔊 (* 🖬	_			- 0	×
Comm Vies GE Pro	jectfile IOT Tool Setting Help				00	options *
►/□0060~ • A ■ □ = = □ ~	Set amp Switch DataDisplay	Alarm Display =	Communicate Schedule Author A User DbTable	Tile	Window Video Time QRCode	
Draw	🛗 Bit Set	Alarm	Information	File	Other	
Project 🗗 🖌	Dis 🔛 Word Set				Outline	đΧ
+ I HM:F104E-Pro(1024x7	Window Set System Operation Set	مينا جرازه	1000			
O SystemSet If MISet NET0:192.168.0. GlobalSet FrojectSet	Gystein Set Condition Set Set User Permission Set Recipe Action Set Airm Event Log Action Set				B_1:Basic Window(1)	• <u>*</u>
The HMITimet	There are a set of the				Window	đ×
HIMIAufhorize Gobalinteriock SystemVar ExternalVar InternalVar EasternalVar EistWar PointerVar StructVar VaribleGroup XatibleGroup XatibleGroup		•			Power on Screen Public Window Basic Window(6) New Basic Window(1) D 2001 High-QRR/m(2001) B 29003:High-Ref(R2003) A 29003:High-Ref(R2003) A 29003:High-Ref(R2003) B 29003:High-Ref(R2003) System Window(3) Screen Saver Window	9
Log F104E-Pro				nouserla	=146 y=01 35 10000-0 0	- 50

2. Set the data to be self-increasing, as follows:

First, execute the setting to select the recurrence, select the variable (the variable selection window will pop up), select the external variable in order - Device 1 - confirm the variable to be bound (double click to confirm). Finally, set the additive value and the upper limit value, and click "OK".

DT Action Set		Action Description	1		10	Time	QRCod
Trigger Mode: ButtonDown *					D	ther	
Company and the second s	Reverse on reaching the	end					
Add: 2 NETO Device1 4X1	Dr Variable Select						
Upper Limit: 5 Constant - 100 0	Variable	CreateVar: Find:	Case Se	nsitive 🔲 Fe	etch bit/b	yte/word	RegTy
immediately Execute "Increase/Decrease" Action	 Variable Node SystemVar 	VarClass/VarName	DataType	DataLen(B	Characte	RegTyp	
Delaying Time: 1 • x100ms Execution Time: 1 • x100ms	SystemSetting UserPermission HMITime	 NET0[Device1](Modbus IP) NET0_Device1_4X1 	unsigned s	2	BIN	4X	Para VarNa
Aroons	NetworkSetti ElectronicSig						DataT
	HMITimeSync						CodeT
	Others HMIKeyBoard						RWMd
	HMISystemInfo	-					DataL
	3 - ExternalVar NET0[Device						Arrayl
	 InternalVar MemoryVar 	1					DataS
	FlashVar PointerVar						Variat
	StructVar						VarNa

3. Set the button labels and graphics as shown in the following figure:

Click on the label, set the name to "Data increase 1", save content to All State, and finally set the font and font size. Click on the "Graphics", select the graph, and click "OK".

Kinco DToolsPro-Configuration editing software

Switch[BL_0001]	▼ UseLabel	Label List	×
LampSet Label Grahics Touching Ena	Text Edit Language Independent Current Language: Chinese(Simplified Han) Current Lib	ID Content 1. Data increase one 2 Data increase one	
Display Set	Direct input Content Save content to text lib Data increase one	Display Setting Auto Extend By Content Label Position Set Label Position By Language Or State	
3	Save Content To All state All language All Font Property	Horizont (+ + =) Vertical: (+ + =) Walking Lantern	
4	Import Font Template Save to Font Lib Family: 阿里巴巴普惠体 2.0 55 Regular ・ ■ Color ・ グ Size: 16 ・ B I U Char spac 0 : Multi-line alignment: ■ ■ ■ Line spac 0 :		
	阿里巴巴普惠体 2.0 55 Regular Color ・ ご Offset X 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4		
Help ID:	1 Describe:	OK Cance	el

Switch[BL_0001]			×
- SwitchFunction - LampSet - Label Grahics Touching Ena - Display Set		k_butto k_frame k_lamp	State: 0 Size(100x100) State Preview: State:0 State:0 State:1
	Import Graphics	Add Graphics	Original size
	Batch Import Picture	Delete	Import Picture
	Shadow Effect Modify Fill		
Help ID:	1 Describe:		3 OK Cancel

4. Set the data display

Select Toolbar "Data Display", set the "Numeric", and the variables to be displayed.

Comm View GE ProjectFile	IOT Tool Setting Help					0	Options ·
	et Lamp Switch DataDisplay		nunicate 🖾 Schedule 📩 Author 🍰 User [yData 🛄 Recipe 🔂 Event 💷 1/0	DbTable File		Adeo Time CRCo	
Draw	Switch/Light Num/Char	Alarm	Information	File		Other	
	Basic Window(1)		750		Outline		8×
HMLF TO4E-Prof 1934-2 + HMLF O SystemSet HMLSet NETO:192 GlobalSet % ProjectSet Grahics	- 2		CharSet 💿 CharSet input		100	Vindow(T) 0001	ම ය ම ය
HMIAutht Display Set	Password Display		_			an Screen	đ×
Globalinte Varible SystemVa ESystemVa EsternalV End FashV End StructVa StructVa StructVa StructVa Communicati COM	3 Read:	• New			: W Jee 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	Window findow(6) w Basic window Basic Window(1) 9001用声程限測度に2 9002用声量化量(2 9003用一等限制度化量(2 9003提合数目を開始して、 9005使化等用時間化(2) ard Window(3) Window(6) Saver Window	9002) 9003) 9)

5. The screen after configuration



2.3 Offline Simulation

1. Click "Compile " in the shortcut toolbar, and after successful compilation, click "Offline" and "OK", as shown in the following figure:

Kinco DToolsPro-Configuration editing software

Save Compile Download		・ク (*) =) tting Help		
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Project	Dat	a increase on		<u>IIEOOtt.It.IZEOtt.</u>

2.Offline screen

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Data increase one

2.4 Download the project

2.4.1 Download project using computer

Select "Download" in the shortcut toolbar, select the network port in the pop-up window, then set the HMI device IP and port, and finally click "Download".

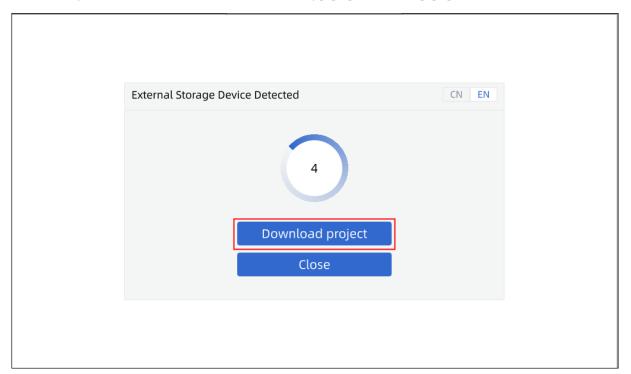
Note: The default IP address of HMI is: 192.168.0.253.

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= 💷 InternalVar		c >	8_29002:用户属性配置(29002)
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- Communication con		4 Download Exit	
A INCOM			

2. 4. 2 Download project using USB flash drive

Supported versions for USB download: servo version>=5277, gui version>=5405

After inserting the USB flash drive for 5 seconds, the following pop-up window will pop up.

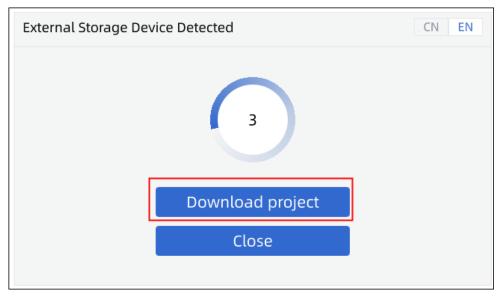


Click "download project". When there are multiple .propkg files in the root directory of the USB disk, and more than one file is different from the HMI, project selection interface will pop up. After selecting the .propkg file to be downloaded, the "Clear data" item is default all checked, you can click to expand the setting check options. After setting, click to download.

	Choose The Download Pr	roject X
USB1	Current Path: /hmi_data/disk/usb1/	 Download Project: Project
		🔄 1.propkg
USB2	━ 08. 基恩士	Project.propkg
💿 нмі	FOUND.000	
	FOUND.001	
		🕨 Clear Data 🔽
CN EN		Download

Note:

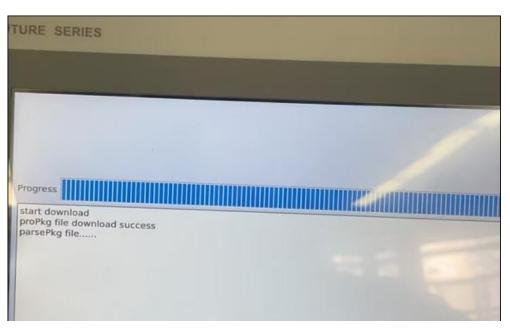
 When the U disk is inserted to power up the screen/the computer downloads the project to the screen, the U disk download prompt box will not pop up. You need to manually remove and insert the USB flash to pop up the download prompt window.
 When there is only one .propkg file is different from the project file in the HMI, after clicking "Download project", a prompt will appear saying "Automatically detect the project, confirm downloading/xxxx. Propkg". Click "OK" to automatically download the project. Click "Select File" to enter the project file selection interface



Download Project CN EN
Automatic detection project, confirm download?
DownLoad Project /hmi_data/disk/usb1/Project.propkg
Note: After clicking confirm, all data will be cleared and downloaded. You can enter [Select Project File] to choose data clearing, or select another file for download.
ОК
Select File
Close

3. When the screen is the factory screen (after firmware update), insert a USB flash drive. If there is only one propkg file under the USB flash drive, the project file will be automatically downloaded directly





If there are multiple propkg files in the root directory of the USB flash drive, the download project selection interface will pop up.

	Choose The Download Pr	roject X
USB1	Current Path: /hmi_data/disk/usb1/	 Download Project: Project
	. .	🔄 1.propkg
USB2	━ 08. 基恩士	Project.propkg
🔊 HMI	FOUND.000	
	FOUND.001	
	[🕨 Clear Data 🔽
CN EN		Download

2.5 Upload

Upload project files, startup screens, and other files in the HMI to the PC for easy access and to provide decompiled files for decompilation operations.

			Upload Setup Instructions		
Upload file	project			1.Select upload method: network port or US	
		Download Upload Version Information Sy	stem Setting Network Setting	2.Click "Select" to set the project name for the uploaded project (no project name suffix is allowed).	
		esignated HMI Scan Use custom IP Use Net0 IP	Use custom IP Use Net0 IP	Upload project file 2 nin/Documents/project.propkg Select Directly decompile after uploading Upload startup screen	3.You can choose whether to check "decompile directly after uploading" or not, please refer to <u>2.6 Decompile</u> for detailed operation of decompile.
		Use Net1 IP IP Port 172.17.6.7 21846	Upload other file	4. The upload operation will be executed only when the project is allowed to be uploaded and the password is entered correctly, the default password of the	

					project: 888888	
Upload startup screen	Download Upload Version Information System Setting Network Setting			1.Select upload method: network port or US 2.Manually check the box when		
		Ommunication Method Network Port USB Port esignated I HMI Scan	Upload Upload project file nin/Documents/project.propkg Select	uploading the startup screen (this box is unchecked by default)		
			Use custom IP Use Net0 IP Use Net1 IP IP Port	Port	Directly decompile after uploading Upload startup screen rs/admin/Documents/hmi.logo Upload other file	3.Click "Select" to set the file name for the uploaded startup screen (no file name suffix is allowed).
		172.17.6.7	21846	4 Upload		

2.6 Decompile

The configuration screen edited by Kinco DToolsPro is saved in the file format of .prodpj, and then compiled to generate the .propkg file required to run on the HMI and downloaded to the HMI, so the project file uploaded by the user from the HMI is a .propkg file, and if you want to open the editing of the project on the HMI by Kinco DToolsPro, you need to decompile the .propkg file to generate a project folder through the decompilation process, and the project folder contains files such as .prodpj, and then finally use Kinco DToolsPro to decompile a project folder containing .prodpj. If you want to use Kinco DToolsPro to open and edit the project on the HMI, you need to decompile the .propkg file to generate a project folder, and the project folder contains .prodpj and other files, and then use Kinco DToolsPro to open the .propkg file for editing.

Communication Method Network Port O USB Port esignated I HMI Scan	Upload Upload project file nin/Documents/project.propkg Select
Use custom IP Use Net0 IP	 Directly decompile after uploading Upload startup screen
IP Port 172.17.6.7 21846	Upload other file
progress information	 Decompile Decompile E:/上传1/2.propkg Save path E:/上传1/2/2.prodpj Select Decompile Save to decompile folder

	Instructions for decompiling settings		
Decompile	Click the "Select" button of decompile, select the project file to be decompiled.		
	Click on the "Decompile" button to decompile the program.		
	Allow the project to decompile and the password is correctly entered, then the decompile		
	operation will be executed, the project's default password: 888888		
Save path	Click the "Select" button of the save path, and select the save path of the folder to be		
	decompiled.		
Save to decompile folder	Show this option if the path to the decompile file is not empty		
	After executing the decompile operation, a subfolder with the same name as the decompile file		
	is generated under the current path of the decompile file, this folder contains the folder of the		
	project resources and the executable file of the host computer.		

3 Basic Operations

3.1 Multiple replication

Right-click "Multi-Copy", you can set the copy type, quantity, spacing and interval according to the regularity to get multiple elements.

		MuliCopy)
Data increase one	1	Copy Type		ype 👬
Cut Copy Paste Delete	Ctrl+X Ctrl+C Ctrl+V Del	Copy Quantity		¢
Multi-Copy		V Direction	c 2	\$
Select All	Ctrl+A	Interval		
Add To Favorites		X Direction:	2	
Add Vector Graphic	s *	10.0000000000		*
Add Components	,	Y Direction:	2	÷
Lock		Allow Varia	ble Changed	
Layer Component Propert	•		riable Name End Numerica	al Changed 🔹
Find in element ran	· · · · · · · · · · · · · · · · · · ·	Direction: In	reasing	4
Variable cross search	h			
Show Align Line Grid		Range: 1	ОК	Cancel
Window Property			UK	Cancer

Multi-copy setup instructions				
Сору Туре	Interval type	Start copying from the right outer frame of the component		
	Pitch type	Start copying from the first point in the top left corner of the component		
Copy Direction	Support 8 kinds of direction selection	The direction of address increment is the same as the direction of serial number increment		
Copy Quantity	Number of copied elements.	You can set the number of duplicate elements in the X and Y directions, or set only one direction separately.		
Interval	X/Ydirection	Spacing between copied elements, in pixels		
Allow variable Changed	Variable Name End Numerical Changed	Incremental or decremental, ranging from 1 to 999		
	Array Variable Index Changed	Incremental or decremental, ranging from 1 to 999		
	Variable Offset Changed	Incremental or decremental, ranging from 1 to 999		

3.2 Common Property

When the selected elements have the same property, you can set the selected elements to the same property at the same time through the public property interface and it will take effect in real time. After selecting a component, click the right mouse button on the public property, and the property displayed at this time is the common property of the selected component. These include border property, fill property, shadow property, translucent property, arrow property, label data, font property,

walking lantern, Touching Enabled Set and Display Set.

Jownload Close	e Project Offlir	ne Cut		Ctrl+X	
E ProjectFile	IOT Tool	Se Copy		Ctrl+C	
- mojecune	1011 1001	Paste		Ctrl+V	
2 ~ 75	i 💿 🗖	Delete		Del	mmunicate 🔄 Schedule 😽 Auth
Sector Se	et Lamp Swit	Select All		Ctrl+A	
<u>F</u> 3 - .	· · · ·	Add To F	avorites		toryData [Recipe 💽 Event 💷
	Switch/Light	Add Vect	or Graphics		Information
	Basic Window(1)		ponents		
d • 5		Lock			500lz50
		Group			
0.		Layer			
v		Alignmer	nt		
		Size Space	e	•	
		Common	Property	•	Border Property
	+ +	Find in el	ement range		Fill Property
k 🚽 🚽		Show Alie	an Line		Shadow Property
1250		Grid		•	Translucent Property
5		Window	Property		
e l					
r					

Note: Common property only supports basic operations on non-table elements. If there are elements in the selected component that do not support public property, the right mouse button will not display the public property item.

3.2.1 Border property

rc	Bi Common Property
Contraction of the	Border PropertyFill PropertyShadow PropertyTranslucent Property
2	Border
	Hyaline Border Line Color 🗾 📝 Line Width ——— 🔄 Line Type ——— 💽
ſ	

	Description of the border property
Uvolino Dordor	Effective when checked, i.e., elements that support transparent borders are displayed without borders
Hyaline Border	when checked
Line color	Set the border color, the color picker can absorb all the colors on the computer screen at this time
Line Width	Set the line width of the border
Line Type	Set the line type of the border
Note:	

1. When the initial property of the selected elements are not consistent, the relevant items in the public property are not checked or displayed as empty

2. The text of the corresponding attribute will be underlined in blue after the attribute is modified

3. Properties will take effect immediately after modification

3.2.2 Fill Property

Di Common Prope	erty	
Border PropertyFill	PropertyShadow PropertyTransluce	nt Property
Fill		
Fill	Back Color	Pattern Fill
	Fore Color	📃 Gradient Fill

	Description of fill property
Fill	Effective when checked, that is, support for filling elements can be set after checking the fill style
Back Color	Set the background color of the fill, the color picker can absorb all the colors on the computer screen at this time
Fore Color	Set the fill foreground color, the color picker can absorb all the colors on the computer screen at this time
Pattern Fill	Effective when checked. It can combine background color, foreground color and select pattern style for filling
Gradient Fill	Effective when checked. It can be combined with background color, foreground color, gradient type, and gradient effect to fill

3.2.3 Shadow Property

Dr Common Property	
Border PropertyFill PropertyShadow PropertyTra	nslucent Property
Shadow	
Shadow Ef Shadow color:	Shaodw Offset: X 4 ‡ Y 4 ‡

time		Description of shadow property
time	Shadow Effect	Effective when checked, i.e. set the component shadow effect
	Shadow Color	Set the component shade color, the color picker can absorb all the colors on the computer screen at this
Shadow Officiat Set the component shading officiat value Officiat value renges 0, 16		time
Shadow Offset Set the component shading offset value. Offset value range. 0~10	Shadow Offset	Set the component shading offset value. Offset value range: 0~16

3.2.4 Translucent Property

c 📑 Common Property	
Border PropertyFill Property	Shadow PropertyTranslucent Property
Translucent	
Transluc transpare	ency 50 :

	Description of Translucent Property
Translucent	Effective when checked, you can set the translucent value of the component
Transparency	Set component translucency value, translucency value setting range: 0~99

3.2.5 Arrow Property

Common Prop	perty
Border PropertyAr	rrow Property
Arrow	
Arrow	Arrow Type 🗧 -

	Description of Arrow Property
Arrow	Effective when checked, you can set arrow properties for the elements that support arrow property
Arrow Type	Set component arrow style, translucent value setting range: 0~99

3.2.6 Label Data

	Property label Data Walking Lantern						
ransiucent	ropertylabel DatawaikingLantern						
🗹 UseLab	el 📃 Language Independent	Cur L	anguage	English(La	tin) 🔄	Cur State	State1
Text Type	Direct input 🔄						
Content	Data increase one						
	Data increase one Auto Extend By Content 📃 Set Label Position	By Language Or	State				
	Auto Extend By Content 📃 Set Label Position	a By Language Or	State				
Font Pro	Auto Extend By Content 📃 Set Label Position			r Center			

	Description of Label Data
Use Label	Effective when checked, you can set arrow property for elements that support arrow property
Language independent	Effective when checked, labels do not change with language switching
Current Language	Labels can be set in different languages
Current State	Set the current status of the configuration screen, which is consistent with [Status/Language]
	under General
Text Type	1. Can choose to directly input or associated text library, the following [content] display
	label data
	2. Can choose the component size according to the content of automatic expansion
	3. Can choose the language and state but with the setting of the label position
Font Property	Set font property such as label font, font size, color, etc.
Shadow	Effective when checked, you can set the label shadow, the range of the shadow is $0 \sim 16$

3.2.7 Font Property

Font properties such as font, font size, and color can be set for the component.

Font Property				
阿里巴巴普惠体 2.0 55 Regular _ 16 -	- 💉	Line spac	0 :	Hor Center
🔲 Bold 🔲 Italy 🔲 Underline Multi-line align	Align Le	Char spac	0 :	Ver Center
Shadow				

3.2.8 Walking Lantern

📴 Common Property	
Translucent PropertyLabel DataWalkingLantern	
WalkingLantern	
Walking Lantern	
Direction: Top Step: 1 : pixel	Speed: 10 C x100ms

	Description of Walking Lantern
Walking Lantern	Effective when checked. You can set the direction, step length, and speed of the Walking
	Lantern
Out of range is displayed	Effective when checked. Labels beyond the component range are displayed as walking lantern
as a walking lantern	
Other	1. When the initial property of the selected elements are not consistent, the relevant item in
	the public property is not checked or displayed as empty and the relevant font is displayed in
	black.
	2. The text of the corresponding property is displayed in blue with underline after the
	property is modified
	3. The property will take effect immediately after modification.

2

3.2.9 Touching Enabled Set

📅 Common Property			
anslucent Property	ching Enabled Set Display Set		
 Touching Enabled Se 	etting		
O Always Valid	Show Invalid Tag		
O <u>AlwaysInvalid</u>	Display Grayscale Font		
<u>Conditional Enabl</u>	inc 🗆 Auto show login window		
Permission Contro	User Pemiss Author		
Express Control	□ False state work		
Express			
+ 💼			
(MB0==ON)			
ID Operation		Express	Parentheses
1		MB0==ON	
Security Setting			
MinPushDuration(10	0ms) 0		
OperConfirm wait	(<u>100ms</u>) 30		
MinPushInterval(100	ms) 0		
			Close
	Touch	ning Enabled Set Instruction	

		Touching Enabled Set Instructions
	Always Valid	Checking indicates that a touch in the active area of the current component can effectively write status values or data to the specified registers.
	Aways Invalid	Checked to indicate that status values or data cannot be validly written to the specified registers even if the current element is touched in the valid area of the touch.
Touching		Permssion Control: Check to indicate that the operator's user privileges must simultaneously satisfy the multiple privileges checked for the component in order to touch the current component and write status values or data to the specified registers.
Enabled Set	Conditional Enabling	Auto show login window: Check this box to indicate that when the current user's permission ID does not meet the set permissions, the password input window provided by the system will be automatically popped up for the user to input the password in order to log in.
		Express Control: Check to indicate that the current element can be touched and the status value or data can be written to the specified register only when the status of the specified bit register or word register satisfies the set condition. (false status in effect means valid when the condition is not met)
Show Invalid	l Tag	Check this box to indicate that the component displays the invalid marker when the component is currently in the invalid touch state.
Display Gray	vscale Font	Check this box to indicate that the component label is grayed out when the current component is in the touch invalid state.
	MinPushDuratio n	The current element must be pressed continuously for a period of time not less than the set time before the status value or data can be effectively written to the specified register. The minimum unit is 100 milliseconds, and 0 means that the minimum press time is not set.
Security Setting	OperConfirm wait	The check box indicates that the HMI will automatically pop up the operation confirmation window when touching the current component, and the status value or data will be written to the specified register only when clicking "OK", and the operation will be canceled automatically when clicking "Cancel" or exceeding the set [Waiting Time] and the user does not confirm the operation with "YES". When "Cancel" is clicked or the set [Waiting Time] is exceeded and the user does not confirm with "YES", the

		tically. (You can add the ability to record the change
	of data in a register when pressed.)	
MinPushInte		wo operations of the same component, the minimum
	unit is 100 milliseconds, 0 means de	o not set the minimum time interval of the operation
3.2.10 Display Set		
📴 Common Property		×
Translucent PropertyTouching Ena	bled Set Display Set	
O <u>Always Display</u>	n Display 🔲 Do not communicate when hidden	Authority Control
	Express Control	False state work
Express		
+ =		
(MB0==ON)		
ID Operation	Express	Parentheses
1	MB0==ON	
		Close

		Display Set instructions
	Always Display	Checked to indicate that the current component is always displayed
Display		Do not communicate when element is hidden: when the variable used by the element is an external variable, check this option and the element will not communicate when it is hidden False state workt: in case of an error status
Set	Condition DisplayDo	Authority Control: Check to indicate that the operator's user privileges need to meet the multiple privileges checked for the component in order for the current component to be displayed.
		Express control: check to indicate that the current component will be displayed only when the status of the specified bit register or word register satisfies the set condition (false status in effect indicates that it is displayed when the expression is not satisfied)

3.3 Batch Modify

Batch Modify includes the Convert Variable function、 Change Label/Text Lib、 Touching Enabled Set and Display Set function. Select multiple elements, right-click, and you will see the "Batch Modify" option, you can choose "Convert Variable" or "Change Lable/Textlib".

If the selected component does not contain a label, right-click will only display the " Convert Variable " function.

Cut	Ctrl+X Ctrl+C		
Copy Paste	Ctrl+V		
		-	Den 1
Delete	Del Ctrl+A	DbTable	
Select All	Ctri+A		File
Add To Favorites			
Add Vector Graphics	•		File
Add Components			0
Lock	-		- بمدلي
Group			
Layer			
Alignment			
Size Space	•		
Common Property	•		W
Batch Modify	•	Convert V	
Find in element range		Change La	abel/Textlib
Variable cross search			
Show Align Line			
Grid	•		
Window Property	-		

3.3.1 Convert variable

Right-click on "Batch Modify" and select "Convert Variable" to bring up the boxes for converting variables, which contain variable information for all boxed elements.

1	ID	Variable To Convert	Variable After Convert	Location	Name
1	0	NET0_Device1_4X1	NET0_Device1_4X1	B_1:Basic Window(1)-BL_0001	SwitchFunction-ButtonDown
7	1	NET0_Device1_4X1	NET0_Device1_4X1	B_1:Basic Window(1)-BL_0002	SwitchFunction-ButtonDown
7	2	NET0 Device1 4X1	NETO Device1 4V1		
			NET0_Device1_4X1	B_1:Basic Window(1)-DD_0001	DataDisplay-Read Variable
		v Variable Changed	NETU_DEVICE 1_4X1	B_1:Basic Window(1)-DD_0001	DataDisplay-Read Variable

	Description of Converting variable
Variable to convert	Variables associated with the current component
Variable after convert	The initial variables are the same as "Variable to convert". Clicking "Variable after convert" will
	bring up a variable selection box, which can be modified to other allowed variable types, and
	then click "Convert" to take effect.

Location	Location of the associated variable element
Name	Information about the component corresponding to the variable
Allow Variable Changed	Check multiple variables of the same type, and the "Allow Variable Changed" checkbox will appear at the bottom. The modification conditions include "Type", "Direction" and "Range", which are consistent with the "Allow Variable Changed" function in multiple replication, please refer to 3.1 Multiple replication for details.
Batch Modify	Check multiple variables with the same allowable variable type, and the "Batch Modify" button will appear at the bottom. After clicking it, the variable selection box will pop up, showing the allowable variable types. After you select the variables, you will modify the checked variables in batch according to the settings in "Allow Variable Changed".

3.3.2 Change Label/TextLib

Right-click on "Batch Modify" and select "Change Label/TextLib" to bring up the box, which contains the label information for all boxed elements.

Thange Label/TextLib	×
✓ Location	Name
☑ 0 B_1:Basic Window(1)-BL_0001	SwitchFunction-Label
☑ 1 B_1:Basic Window(1)-BL_0002	SwitchFunction-Label
Language Chinese(Simplified Han) - State State 1 -	
Text Type Direct input	
Content Data increase one	
	Change Cancel

Description of changing Label/TestLib	
Location	The location of the component corresponding to this label
Name	Information about the elements corresponding to this label
Language	You can set the content of the component under each language. If the component is checked for language irrelevant, you can gray out the checkbox
State	You can set the content of each state of the component. if the component has only one state, this item is not displayed
Text Library	Text type select "Use Text Library" will show the current text library, you can select other text libraries.
Text Type	You can select "Direct Input" or "Use Text Library". Note that "Use Text Library" can only be selected if there is content in the project text library.
Content	You can modify the contents of the corresponding settings. If you select "Use Text Library", the text library content will be displayed.

3.3.3 Touching Enabled Set

\checkmark	Position		Name	Touching Enable	Condition Enable		Control Set		More
~	B_5:Basic \	Window-SB_0003	SB_0003	Conditional Enabling 🔻	Permission & Express Control	*	Express	;Author8; *	More
	B_5:Basic \	Window-BL_0001	BL_0001	Conditional Enabling *	Permission & Express Control		Express	;Author8:	More
	B_5:Basic \	📴 Batch Modify					×	;Author8; •	More
~	B_5:Basic \							;Author8; 🔹	More
	B_5:Basic \	Show Inva	lid Tag 🗌	Display Grayscale Font	False state work 🗌 Auto show lo	ogin w	indow	;Author8; *	Mor
		MinPushDu 0	ration(100n	INS) ✓ OperConfirm wa 30	ait(100ms) MinPushInterval(10	0ms)			

		Т	ouching Enabled Set Instructions		
Position	This labe	l corresponds to the le	ocation of the component		
Name		ent information corres			
Touching Enable	Click on t	the drop-down box to	select Always Active, Always Inactive and Conditionally Enabled		
Condition Enable		on Control	A check indicates that the operator's user privileges need to satisfy more than one of the component's checked privileges before the current component can be touched and status values or data can be written to the specified registers.		
	Express Control Permission & Express Control		Check indicates that the current element can be touched and the statu value or data can be written to the specified register only when the status o the specified bit register or word register satisfies the set condition. (false status in effect means valid when the condition is not met)		
			The current element can be touched and the state value or data written to the specified register only when both the permission control condition and the expression control condition are satisfied.		
Control Set			t expression control or permission control		
More	Click "M	ore" to bring up the L	logo Settings screen and Security Settings screen.		
	Show Invalid Tag		Check this box to indicate that the component displays the invalid marker when the component is currently in the invalid touch state.		
	Display Grayscale Font Auto show login wirdow		Check this box to indicate that the component label is grayed out when the current component is in the touch invalid state.		
			Check the box to indicate that when the current user privilege ID does not meet the set permissions, the password input window provided by the system will automatically pop up for the user to enter the password to log in.		
		MinPushDuration	The current element must be pressed continuously for a period of time not less than the set time before the status value or data can be effectively written to the specified register. The minimum unit is 100 milliseconds, and 0 means that the minimum press time is not set.		
	Security Setting	OperConfirm wait	The check box indicates that the HMI will automatically pop up the operation confirmation window when touching the current component, and the status value or data will be written to the specified register only when clicking "OK", and the operation will be canceled automatically when clicking "Cancel" or exceeding the set [Waiting Time] and the user does not confirm the operation with "YES". When "Cancel" is clicked or the set [Waiting Time] is exceeded and the user does not confirm with "YES", the operation will be canceled automatically. (You can add the ability to record the change of data in a register when pressed.)		
		MinPushInterval	Minimum time interval between two operations of the same component,		

		the minimum unit is 100 milliseconds, 0 means do not set the minimum time interval of the operation
224D' I	G (

3.3.4 Display Set

\checkmark	Position	Name	Touching Enable		Condition Enable	Control Set		More
~	B_5:Basic Window-SB_0003	SB_0003	Condition Display	*	Permission & Express Control 🔹	Express	:hor7;Author8; *	More
~	B_5:Basic Window-BL_0001	BL_0001	Condition Display	Ŧ	Express Control	Express	uthor7;Author8; -	More
~	B_5:Basic Window-LD_0001	LD_0001	Condition Display	Ŧ	Express Control	Express	uthor7;Author8; -	More
~	B_5:Basic Window-BL_0002	BL_0002	Condition Display	Ŧ	Express Control	Express	uthor7;Author8; -	More
~	B_5:Basic Window-BL_0001	BL_0001	Condition Display	*	Express Control	Express	uthor7;Author8; -	More
						_		

		Display Set instructions
Position	This label corresponds	s to the location of the component
Name	Component information	on corresponding to this tag
Touching Enable	Click on the drop-dow	n box to choose between Always and Conditional Display
Condition Enable	Permission Control	Checking indicates that the operator's user permissions need to satisfy more than one of the component's checked permissions in order for the current component to be displayed
	Express Control	Checked to indicate that the current component will be displayed only when the status of the specified bit register or word register satisfies the set condition (false status in effect indicates that the expression is displayed when it is not satisfied)
	Permission & Express Control	The current component is displayed when both permission control conditions and expression control conditions are met.
Control Set	Click the drop-down b	box to set expression control or permission control
More	Do not communicate when hidden	When the variable used by the component is an external variable, check this option so that the component will not communicate when it is hidden.
	False state work	Effective on error status

3.4 Find/Replace

 $Click \ "Find/Replace" \ or \ hold \ down \ "Ctrl+F" \ to \ find \ and \ replace \ targets, \ variables, \ text \ and \ macros.$

Comm	View	GE	Pro	jectFile	IOT	Tool	Sett
×		₽ Fi	nd/R	eplace) MBP	回普重は	205
e 📕	Select	Muli Copy Copy Win			阿里巴巴普惠体 2. A* A ⁻ B I		
pboard		Edi	it				F
t		8:	×	DT B_	1:Basic V	Vindow(1	I) 🛛

3.4.1 Find/Replace Variable

Find Content Find Find Find Text Find Macro	2		🕈 Partial Replace
Location	Name	Data	Replace

 Systemval 	rClass/VarName		Case Setts	itive RegType: All Type	DataType: AllType	VarGroup: all Group
HMITime NetworkSetting ElectronicSign HMITimeSync Others HMIKeyBoard HMISysteminfo HMICommuni * ExternalVar NetTO[Device1 * InternalVar MemoryVar FlashVar StructVar	NET0[Device1](Modbus IP) NET0_Device1_4X1	Strategist Cont. In Americania	Charact Reg1 BIN 4X		ParamV	

After selecting a variable, you can press the backspace key to expand all similar variables for re-selection.

Find NET0_Device	1_4X1		
Replace		-	📰 Partial Replac
Location	Name	Data	Replace

You can select the entire array or a specific array subscript.

Click on 'Find Options' to set the range condition and component condition checkbox to search. Click "Init" to restore the default search conditions.

Find NET0_Dev	vice1_4X1					В
Replace	Bi Find Options				1	
Location	Range		🗾 Selel	ct All	Element 8	Seleict A
	Base Window	B 1	- B 29005		⊡ Line	ć
	KeyBoard Window	К 1	🔄 - КЗ	-	✓ Rect ✓ Ellipse	
	System Window	S 1	<u> </u>	-	Sector ArcAct	
	Public Window				✓ Polyline ✓ Bezier	
	E ScreenSaver Window	1			✓ Polygon ✓ text	
	🛅 Backgroud Element				✓ image ✓ Scale	
ind Options	Macro				✓ Table ✓ slide	

Double-click to find the corresponding item, the mouse cursor will automatically jump and select the component.

	ent Find Variable	Par	tial Replace	
	Location	Name	Data	Replace
3	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
2	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
0	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
1	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
				100

In the same operation, select the replacement address, check the variables to be replaced, click "Replace" to replace only the checked variables, and click "Replace All" to replace all the variables found with the target variables.

	Find NET0_Device1_4X1 lace NET0_Device1_4X55		Par	rtial Replace
21	Location	Name	Data	Replace
	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
\square	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N
		Databispisy recount	HEIO_DORCH_ANT	

F	ind NET0_Device1_4X1	(inter-			
Repl	ace NET0_Device1_4X55				🛅 Partial Replace
25	Location	Name	Data	Replace	
3	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N	
2	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X1	N	
0	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X55	Y	
1	B_1:Basic Window(1)	DataDisplay-Read	NET0_Device1_4X55	Y	

Partial replacement:

1. For a field with multiple recurrences, for example, the variable "a1b1c1", "d1e1" can be replaced by "a2b2c2". "d2e2", as shown in the following figure:

	ind 1 ace 2			Partial Replace
	Location	Name	Data	Replace
0	B_1:Basic Window(1)	DataDisplay-Read	a1b1c1	N
1	B_1:Basic Window(1)	DataDisplay-Read	d1e1	N

	ind 1 ace 2				Partial Replace
5	Location	Name	Data	Replace	
]0	B_1:Basic Window(1)	DataDisplay-Read	a2b2c2	Y	
]1	B_1:Basic Window(1)	DataDisplay-Read	d2e2	Y	

2. Batch replacement of entire register types:

For example, I want to replace all the "TC" register types in the screen with "CC" types. The address remains the same, only the register type is changed, as shown in the following figure:

F Repl	ace		🗖 Par	tial Replace
	Location	Name	Data	Replace
0	B_1:Basic Window(1)	SwitchFunction	NET0_Device1_TC2	N
1	B_1:Basic Window(1)	SwitchFunction	NET0_Device1_TC1	N

Find TC Replace CC				🖉 Partial Replac
Location	Name	Data	Replace	
0 B_1:Basic Window(1)	SwitchFunction	NET0_Device1_CC2	Y	
1 B_1:Basic Window(1)	SwitchFunction	NET0_Device1_CC1	Y	

3.4.2 Find/Replace Text

Search content can be selected from "All Text", "Label/TextLib", "Operational Data", with full text matching, case matching

```
and wildcard matching.
```

Sr Find				×
Content Find Text	All Text	🔲 Whole Words Only	Case Sensitive	Use Wildcards
Find	Label/TextLib			
Replace	Operational Data			

1. All Text: Find all the texts that meet the search criteria.

	ST Find Options						×	dcard
Fi epla	Range			Selel	ct All	Element	Seleict All	
	 Base Window KeyBoard Window System Window Public Window ScreenSaver Window Backgroud Element Macro 	B 1 K 1 S 1	2 - 2 -			 ✓ Line ✓ Rect ✓ Ellipse ✓ Sector ✓ ArcAct ✓ Polyline ✓ Bezier ✓ Polygon ✓ text ✓ image ✓ Scale ✓ Table ✓ slide 		
						Init	OK	

	ent Find Text A	Il Text 📑 🛅 Who	ole Words Only 🛛 🔳 Case	Sensitive	Use Wildcards
Repla	ace				
5	Location	Name	Data	Repl	
0	B_29001:用户权限浏览	SwitchFunction-Label	New User	N =	
1	B_29001:用户权限浏览	SwitchFunction-Label	New User	N	
2	B_29001:用户权限浏览	Text-Text	Restoring the default	N	
3	B_29001:用户权限浏览	SwitchFunction-Label	Delete User	N	
4	B_29001:用户权限浏览	SwitchFunction-Label	Delete User	N	
5	B_29001:用户权限浏览	User-Title Name Set-用	User name	Ν.	
4				¥	

2. Label/TextLib: Find only static text, component label and content in text libraries.

Fi	nd user				
Repla					
101	Location	Name	Data	Repl	1
0	B_29001:用户权限浏览	SwitchFunction-Label	New User	N *	
1	B_29001:用户权限浏览	SwitchFunction-Label	New User	N	
٦C	B_29001:用户权限浏览	Text-Text	Restoring the default	N	
3	B_29001:用户权限浏览	SwitchFunction-Label	Delete User	N	
4	B_29001:用户权限浏览	SwitchFunction-Label	Delete User	N	
5	B_29001:用户权限浏览	User-Title Name Set-用	User name	Ν.	

3. Operational Data: Find only the operational parameters set by the project, such as operation log settings, user settings, recipe settings, keyboard mapping, etc.

d user				
e				
Location	Name	Data	Repl	
B_29001:用户权限浏览	SwitchFunction-Label	New User	N =	
B_29001:用户权限浏览	SwitchFunction-Label	New User	N	
B_29001:用户权限浏览	Text-Text	Restoring the default	N	
B_29001:用户权限浏览	SwitchFunction-Label	Delete User	N	
B_29001:用户权限浏览	SwitchFunction-Label	Delete User	N	
B 29001:用户权限浏览	User-Title Name Set-用	User name	N	
	.ocation 29001:用户权限浏览 29001:用户权限浏览 29001:用户权限浏览 329001:用户权限浏览 329001:用户权限浏览	Name 29001:用户权限浏览 SwitchFunction-Label 29001:用户权限浏览 SwitchFunction-Label 29001:用户权限浏览 Text-Text 29001:用户权限浏览 SwitchFunction-Label 29001:用户权限浏览 SwitchFunction-Label	Name Data 29001:用户权限浏览 SwitchFunction-Label New User 29001:用户权限浏览 SwitchFunction-Label New User 29001:用户权限浏览 Text-Text Restoring the default 29001:用户权限浏览 SwitchFunction-Label Delete User 29001:用户权限浏览 SwitchFunction-Label Delete User	Name Data Rept 29001:用户权限浏览 SwitchFunction-Label New User N 29001:用户权限浏览 SwitchFunction-Label New User N 29001:用户权限浏览 Text-Text Restoring the default N 29001:用户权限浏览 SwitchFunction-Label Delete User N 29001:用户权限浏览 SwitchFunction-Label Delete User N

3.4.3 Find/Replace Macro

Select the drop-down for the macro you want to find.

Content	Find Macro	
Find	Macro_1	
	Macro 1	
Replace	Macro 2	

Click Find, double click and the software automatically jumps to the location.

Find Macro_1	*		
Replace Macro_1			
Location	Name	Data	Replac
0 B_1:Basic Window(1)	SwitchFunction	Macro_1	Ν
	-		

After setting the replacement macro, the replacement operation can be performed.

3.5 Find in element range

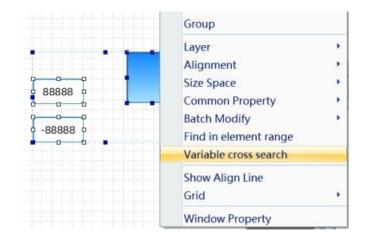
Select the multiple elements to be found on the screen and right-click on " Find in element range".

Grid Window Property Find Find Replace Partial Repla		0 0 0 - 0 0 -8888	Common Property Batch Modify Find in element rang Variable cross search Show Align Line		
Content Find Variable Find Replace Partial Replace			Grid	•	
Location Name Data Replac	Find				Partial Replace
		Nam	e	Data	Replac

Refer to 3.4 - "Find/Replace" for step-by-step instructions

3.6 Variable cross search

Select multiple elements on the screen and right-click "Variable cross search" to display the address and location information of the selected component.



ID	Variable	Location	Name	
0	a2b2c2	B_1:Basic Window(1)	DataDisplay-Read Variable	
1	d2e2	B_1:Basic Window(1)	DataDisplay-Read Variable	

Double-click the cross-search variable to jump to the Find \ Replace screen, which has automatically looked up the so-called location information of the variable's appearance. Next, you can perform a replacement operation on it by double-clicking on the item found, and the mouse cursor automatically selects the component at its location.

2	ent Find Variable			
F Repl	ind a2b2c2 ace	(*****) [*****		Partial Replace
-	Location	Name	Data	Replace
]0	B_1:Basic Window(1)	DataDisplay-Read	a2b2c2	N

Refer to 3.4 - "Find/Replace" for step-by-step instructions for replacement.

4 System Set

4.1 HMI Set

As shown in the figure below, the HMI settings mainly include network port settings and product descriptions. The IP address, subnet mask and gateway of the screen can be set in the network port setting. When downloading, check 'Download completed' to update the IP and it will take effect on the screen. The product description includes the model, size, resolution, memory size, etc. of the touch screen hardware used, making it convenient for users to view touch screen related parameters during use. At the same time, we can also view the communication type corresponding to the touch screen COM. The touch screen model shown in the following figure supports RS232/RS485/RS422 for COM 0 and 1, while RS232 is only supported for COM 2.

- III HMI:F104E-Pro(10)24x76				
SystemSet	Rotate Displa	IY.			
HMISet NET0:192.1	168.0.1	Normal(Horizontal direction)	ertical(Clockwise rotati	on 90 degrees) 🔘 Vertical(Anticle	ockwise rotation 9
– 🔂 GlobalSet – 🔏 ProjectSet	Net0				
S HMITimer					
- G HMIAuthor	rize IP Addi	ess: 192 . 168 . 0 . 100 Su	bnet Mask: 255	255 255 0 Gateway: 19	92 . 168 . 0
Globalinter	rlock	IS1: 0.0.0.0	DNS2: 0 .		
- O Varible	Ur	4S1: 0 . 0 . 0 . 0	DINSZ: U .	0.0.0	
SystemVar	HMI Property	6			
ExternalVar	r HMI Property				
ExternalVar	r HMI Property Pevice1 HMI Name	F104E-Pro	HMI Size	10.4	ouch Mod
 ExternalVar NET0[D InternalVar 	r HMI Property Pevice1 HMI Name	F104E-Pro			
ExternalVar	r HMI Property Device1 -IMI Name yVar Resolution		HMI Size Color	10.4 24bitTruecolor	ouch Mod Flash Size
 ExternalVar InternalVar Memory FlashVar 	r HMI Property Device1 -IMI Name yVar Resolution	F104E-Pro			
ExternalVar ExternalVar MeTo[D InternalVar ExternalVar ExternalVar ElashVa OnterVar	r HMI Property Device1 HMI Name yVar Resolution If 1emory Siz	F104E-Pro 1024x768	Color Fram size	24bitTruecolor	Flash Size
 ExternalVar NETO[D InternalVar Memory FlashVa PointerVar StructVar 	r HMI Property Device1 HMI Name yVar Resolution Ir Iemory Siz Audio out	F104E-Pro 1024x768	Color	24bitTruecolor	Flash Size
 ExternalVar NETO[D InternalVar Memory FlashVa PointerVar StructVar VaribleGrout 	r HMI Property Device1 HMI Name yVar Resolution ar Temory Siz Audio out	F104E-Pro 1024x768 512MB Support	Color Fram size SD Card	24bitTruecolor 32KB Support	Flash Size USB Host COM0
 ExternalVar NETO[D InternalVar Memory FlashVa PointerVar StructVar 	r HMI Property Device1 HMI Name yVar Resolution ar Iemory Siz up COM1	F104E-Pro 1024x768 512MB	Color Fram size	24bitTruecolor 32KB	Flash Size USB Host

4.2 Global Set

4.2.1 Backlight and screensaver

Backlight an	d screensa	aver				
Lower li	80%	٣	3	îmin	0	: sec
🔽 Turn off	backl					
Lower ligh	nt before p	assing:	10	:min	0	: sec
🔲 Warn	ing/event	occur a	uto ti	urn on	back	light
	not recov off backli		bid a	auto lov	ver li	ight
Screen :			10	îmin	0	: sec
Saver use v	Sci	reen Sav	er W	ind 👻		
Exit save	r window	need us	er pri	ivilege		
Authorize	1.4	Author1		-		

	Setting instructions
Lower light to	After not touching the screen for a period of time, the brightness of the screen is reduced to the specified
	brightness. As shown in the figure, if checked, the default value is 3 minutes without operation, and the
	brightness is reduced to 80%.
Turn Off	Backlight refers to when the duration of not touching the HMI screen is equal to this setting value, the HMI
Backlight	automatically turns off the screen backlight and enters the energy-saving state. When the HMI screen has
	touch operation again, it can end the energy-saving state and turn on the screen backlight. Turning off the
	backlight as shown in the figure can be used in conjunction with adjusting the brightness. It can be set to
	turn down the brightness and do not operate for a specified time before entering the backlight energy-
	saving state. The default time is 10 minutes.
Screen Saver	If you enter the screensaver state without operating for a specified time, you can set the screensaver
	interface by yourself. After checking the user permission required to exit the screensaver window, set the
	specify user permission, and check 'Exit the saver window need user privilege'.

4.2.2 Language Setting

.anguage setting Used Language Nur Default Language:	n: 2 Chinese(Simplified Han) Language Set	B_1:Basic Window(1) B_1:Basic
nput method set		Window
🛱 LangLib		
Language Setting Language Num:	2	Font Property Import Font Template Save to Font Lib
ID	LangName	Family: 语体 2.0 55 Regular * Color *
ID	LangName	Size: 16 B I U Char spac 0
ID Î Chinese(Simp		
	lified Han)	Size: 16 - B I U Char spac 0
1 Chinese(Simp	lified Han)	Size: 16 • B I U Char spac 0 Multi-line alignment ■ ■ Line spac 0 Color: ■ Color • Color: ■ Color • Color: ■ Color • Color

	Language Setting Description
This function needs to	be combined with the language library. For specific attributes of the language library, please refer to
Chapter19.3:Language	Library.
Used Language Num	Set the number of editable languages in the language library, up to 32 languages can be set
Default Language	After the HMI is powered on, the language displayed on the configuration interface is the language
	set here.

4.2.3 Input Method Set

Input method set		
Border Color:	Border Color	Ŧ
Back Color:	Back Color	Ŧ
Select Color:	Select Color	÷
	Input method font set	
Element Invalid Color:	Invalid Color	Ŧ

As shown in the figure, set the border color, back color, select color, font, and element invalid color of the input method.

4.2.4 Touch tone and System Prompt

Touch tone		
C Use buzzer		
🔽 Use sound lib		
🛅 Enable control:		
✓ Default sound file	Sound lib	•

Di SoundLib					- 0	×
Sound Lib		ation will be directly saved, can	not undo.			
Sound nam	ie	File name	File size(KB)	Play time(S)	Import	Sound
					ImptFrom	
					Jse ExStora	ige Sound
					Export S	Sound
					Delete S	Sound
					Play So	ound
					ImptMrg	SundLib
					Export So	undLib
					Cle	ar
0				Select	and Exit	Exit

- Use buzzer: Set the HMI to enable touch beeping, and you can also control whether to turn it on by enabling it
- Using sound library: Set the HMI sound to enable the sound library. You can also control whether to turn on the sound library by enabling it. This feature needs to be used in conjunction with the sound library.
- Show System Prompt: Set the time for the system prompt to display, with a default of 10 seconds.

4.2.5 Window

The difference between the use of the start window and the main window(HOME) is that the start window refers to the interface displayed after HMI startup, and users can set the window display after startup. There is an option in the window

operation settings to quickly return to the main window of the project.

Window		
Start window:	B 1:Basic Window(1)	¥
Main window(HOME):	B 1:Basic Window(1)	×
Common window position:	Display under basic winc	*

	Setting description				
Start Window	HMI startup screen				
Main Window	HMI main screen window				
Common Window Position	Can be set to display above or below the basic window				

4.3 Project Set

4.3.1 Item state graphic miss

Item state graphic miss

- Not use graphic while state graphic miss
- O Use last state graphic while state graphic miss

Item not communication display

- Not display
- O Display picture

Item state graphic miss Description					
Item state graphic miss	You can choose not to display the graphic when the graphic status is missing or to				
	display the last status graphic. For example, when setting a control graphic, only state				
	1 has a corresponding graphic, then control state 2 and subsequent states can either not				
	display the graphic or display the graphic of state 1.				
Item not communication display	Can be set to not display or display images.				

4.3.2 Use USB Default Input

	Use USB Default Input Description					
Use USB Default	If checked, the string read by the card reader or scan gun will be directly displayed in the specified					
Input	Input variable; Unchecked, you need to manually select a character variable in the screen to receive display. Default not enabled					
Notity write success	After enabling, successful writing will notify the execution of the specified action					
Note: This feature is mu	tually exclusive with USB card swiping automatic login					

4.4 Clock Set

HMI Time Zone:	(UTC+08:00) 北京,重庆,香港特别行政区,乌鲁木齐	*
Auto Set Summer Tir	me(DST)	
	-	
Forbid Modify System	lime	
Use time synchronization	28	

	Clock set description
HMI Time Zone	You can choose the time zone of the system time according to your needs. You can check the option to automatically set daylight saving time and make relevant settings, and you can also disable modifying the system time.
Use time synchronization	In distributed systems, due to physical dispersion, the system cannot provide a unified global clock for independent modules. In order to achieve the same time value for these clocks, time synchronization operations must be carried out. Check the box to perform the corresponding operation.

4.5 HMI Authorize

It can achieve the function of timed screen locking. When the HMI reaches the authorization expiration time, an expiration window will pop up. Only after entering the authorization password on the specified page can the HMI continue to be used normally. Otherwise, the HMI will continue to display the expiration pop-up window. The time judgment is based on the system time of the HMI. Once the authorization function is used, modifying the system time will not result in invalid authorization. At the same time, you can check the related content of the upcoming expiration reminder settings.

×	Add
	Modify
\$	
-	Delete
	Clear
ncel	
	ncel

4.6 Global Inter Lock

When there is a PLC or multiple PLCs connected by multiple HMIs in the network, in order to prevent malfunction by

Global interlock setting instructions					
To enable the global interlock f	unction, it needs to be checked and enabled. It is not checked by default				
Device grouping	Interlocking restrictions can be applied between HMIs in the same group				
Dynamic grouping	Modify the corresponding variable value to dynamically set grouping				
Unlock remaining time	Every time the HMI is touched, the countdown starts at this time and automatically				
	unlocks and releases touch control when it reaches 0				
Authorization unlock prompt	After checking, the device that has obtained control will pop up an authorization				
	application pop-up window sent by other devices				
Occupied status touch prompt	When checked, when the main control is occupied by other devices, the touch HMI will				
	pop up relevant information about the main control device (remaining time, name of the				
	main control device)				

multiple people, it can be set to only operate a single or a certain number of PLCs simultaneously.

Authorization unlocking prompt window: When the main control device pops up this window and clicks agree to authorize, the main control will be transferred to the device that initiated the application

There are three ways to release control:

1. Transfer authorization to the device initiating the application

When the countdown to unlocking time reaches 0, control will be automatically released

3. Action Setting - Operation Control - Release Control Action Active Release

4. For devices that have obtained the initiative, if they go offline for more than 5 seconds (other devices show that the countdown time for unlocking the main control device is stuck for 5 seconds without changing), it will automatically determine that the device is offline and the offline device's permission will be automatically released. Other devices can operate to gain control; When the offline device's network is restored, it can automatically rejoin the interlock group and perform interlock operations normally

Attention: Users can create template windows for authorization unlocking and occupancy status touch prompts. It should be noted that closing windows cannot be added. After manually closing the pop-up window, it will no longer pop up when other

devices initiate authorization applications.

Time	Window	₽×
lips	🔤 Power-on Screen	
There is a device that people to papely for control views	🗖 Public Window	
There is a device that needs to apply for control right.	🖃 🎫 Basic Window(8)	
Do you agree to transfer the control right to it?	🔤 New Basic window	
	🖾 B_1:Basic Window(1)
If agree, you'll not be able to touch the screen.	🖾 B_29001:User Perm	ission Bro
	🖾 B_29002:User Attrib	ute Config
	🖾 B_29003:Change Us	er Passwor
Deny Agree	🖾 B_29004:Authorizati	on Expirati
	B_29005:Authorizati	on Expirati
	🖾 B_29006:Authorizati	on unlock
	B_29007:Occupied	status touc

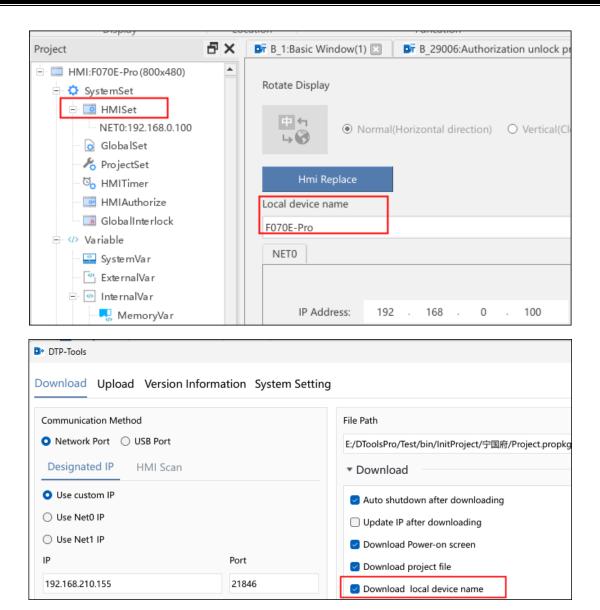
Related system actions:

🗗 Action Set			
ButtonDown	Ŧ		
Set			
Operation Control	Ŧ	ApplyGlobalControl	Ŧ
		ApplyGlobalControl	
		ReleaseControl	
		ConsentTransferControl	
		RefuseTransferControl	

Related system variables:

\$MasterDevName	string	31	UTF-8	SMW	1120	31	Read	FALSE
\$LocalDevName	string	31	UTF-8	SFW	190	31	Read/Wr	FALSE
\$ControlStatus	unsigned int	4	BIN	SMW	1164	4	Read	FALSE
\$ControlRemaining	unsigned int	4	BIN	SMW	1160	4	Read	FALSE

Local device name: Initially the HMI model, it can be edited in HMI settings or read and write operations can be performed on the screen. When downloading a project, check "Download Local Device Name" to update it, and leave it unchecked to keep the current name on the screen



5 Variable

The word "variable" comes from mathematics and is an abstract concept in computer language that can store calculation results or represent values.

In DToolsPro software, elements or functional modules are associated with variable names, so variables used in project programs need to be first established in the variable table to define a variable name that is easy to identify and unique. Variables can be "external controller variables", "internal variables", or HMI "system variables".

5.1 System Variable

System variables are used to monitor or access system parameters on the operation panel. The use of system variables is the same as that of controller variables, and can be associated with elements in the screen configuration, as well as in related functional modules or macro command scripts. System variables mainly include HMI time variables, user permissions, system information, and other variables that can be directly used.

oject	NET0:192.168.0.100	Br MemoryVar C Dr SystemVar C RegisterType: all type - DataTy	pe: all Type	* Sea	rch: search	10	Case	Sensitive
	GlobalSet ProjectSet	VariableType: SystemVar	pe, an type	- HeaderEdit			Case	Sensitive
1.	HMITimer	VarClass/VarName	DataType	DataLen(Bit/Byte	CharacterSet	RegType	Re -	SelectAll
	HMIAuthorize GlobalInterlock	 SystemVar UserPermission 						Unselect
	arible	\$User_Password \$User_Name	string string	15 31	UTF-8 UTF-8	SMW	11.	Find
	SystemVar	\$User Group	string	31	UTF-8	SMW	16	
÷ [") ExternalVar	\$User_Description	string	31	UTF-8	SMW	34	
	COM0[Device1](Mo	\$Set_UserPermission_Status \$Set_User_Password	bit string	1	BIN UTF-8	SMB	11 22	
B 40	InternalVar	\$Set User Name	string	31	UTF-8	SMW	19	
	- MemoryVar	\$Set User Group ID	unsigned sh	2	BIN	SMW	25	
	– 🚝 FlashVar	\$Set User Description	string	31	UTF-8	SMW	310	
0	PointerVar	\$Set User Account Status \$Set Password Retention	bit unsigned sh	1	BIN	SMB SMW	2 26	
	StructVar	\$Set Password Modify Reminder	unsigned sh		BIN	SMW	26	
	VaribleGroup	\$Set Modify Password Status	bit	1	BIN	SMB	3	
	VarGroup1	\$Set_Logout_Time	unsigned sh		BIN	SMW	26	
34	🕻 DataType	\$Set_Employee_Card_ID	string string	31	UTF-8 UTF-8	SMW SMW	38	
= 🚢 Co	ommunication connection	\$Set_Confirm_Password \$Logout_Time	unsigned sh	2	BIN	SMW	19	
8 -	COM	\$Employee Card Login	bit	1	BIN	SMB	12	
-	COM0:1:Modbus RT	\$Employee_Card_ID	string	31	UTF-8	SMW	28-	
	Device1:StationNo:1	 SystemSetting 		120				

5.2 External Variable

External controller variables refer to the variables used by the controller in communication with the operation panel, which are used to read real-time data of the controller end variables or make changes to the values of the control end variables. Please refer to the corresponding driver manual for specific establishment and support types.

Comm View GE Project	File IOT	SF Create new Varible				
P Find/Repla	ce Mu	Variable set				
aste Select Muli Copy	1.0	Var.Name: V Auto(R	eg.Type+Addr)	VarGroup:		
📩 🔹 🔁 Copy Win	A* .	COM0 Device1 4X1	Sat 1			
Clipboard Edit		DataSource:				
oject 🗗 🗙	Dico	COM0[Device1](Modt	ous RTU Extend)			
	Registe	Variable type: Cha	racterSet: StringLen(Byte):	UseArray	UseTwoDim.Array	
		short Bit	10 :	ArrayLen: 2	2	
 SystemSet Image: Image: I	Variabl	Reg.Type: Re	g.Addr.Value:			
NET0:192.168.0.100	VarCla	4X 🔁 1				
GlobalSet	co	2V	Datalength	i(byte)	RegNums:	
ProjectSet		SX	2		1	
- 5 HMITimer		6X	SampleCycle:	Pri.:	SampleType:	
- HMIAuthorize		4X-DINV	- 1	normal	 Normal 	
GlobalInterlock	1	3X-DINV				
a do Varible		Contraction of the second				
SystemVar						
- The External Var						
COM0[Device1](Mo						
R InternalVar						
📇 FlashVar						
 PointerVar 						
StructVar						
DataType						

As shown in the above figure, taking the Modbus RTU Extend protocol as an example, after adding the protocol, there will be multiple protocol directories under the external variables. Double click to enter the variable page, and click "Add" to see register types related to the controller, such as 3X and 4X, in the register type section. Select and add according to your needs.

5.3 Internal variable

Internal variable can be used to calculate values that do not need to be processed in the controller, such as using only information displayed to the operator. The use of internal variables is the same as that of controller variables, and any number of internal variables can be created. Internal variables are divided into memory variables and flash variables, where flash variables are power down hold data.

5.4 Pointer Variable

Pointer variables can be used to store/point to variables corresponding to index values.

Pointer variable properties screen:

File Comm View GE	ProjectFile IOT Tool Setting Help	Options
	🕹 📼 📄 🚼 💵 🖝 🗘	
OperLog Local Remote	Service Keyboard Global Language PLCControl Mail Secure	
	imunication System	
	F B_1:Basic Window(1) 🛛 📴 PointerVar 🔀	Outline 🗗 🗙
SystemSet Val	Dr Variable parmam set	Case Sensitive The document has no outline content.
B I HMISet	VarName Z AutoCreate VarGroup	Add
NET0:192.1(Va NET1:192.1(Va	指针变量6 🔹	Del. one row
GlobalSet	Variable type: 3 🗆 Array	Del. one row
🕹 ProjectSet	unsigned short 🔹 1 🕂 ArrLen(OneDim)	SelectAll Window
ा HMITimer		Unselect 🔤 Power-on Screen
HMIAuthori GlobalInteri	IndexVar 4	Del. multirow
B- Variable	MW0 Ø	* Sasic Window(8)
- SystemVar		Import * 🔛 Keyboard Window(3)
- ExternalVar	order Number index variable	Export all
🛛 🕐 InternalVar	1 0 1 MW2[0]	Export all
- 💀 Memory	2 1 ¹ MW2050 0 +	
FlashVar 1		Find
PointerVar StructVar	☑ 3 2 ⁺ MW2[1] Ø +	
B - VariableGrou	insert 1 c row Double click to add a new entry (can add 1021 lines)	
	cut	
💭 DataType	сору	
e 🚊 Communicatior	Va paste	
e 📼 COM	delete	
✓ 1: 0MO2	multi-copy value change at the end of variable name 1 : row	7 Project tree Template Library
	select all array variable index change 1 : row Cancel OK	roject tree Template Library
Log Unused	mouse:[x=1 y=569]	Apply to global

- 1.1. double-click to open the list of pointer variables;
- 2. click to add a new pointer variable;
- 3. Select the data type of the pointer variable;
- 4. Associate index variables (8-64 bit word variables are allowed to be associated);
- 5. Add the pointer variable:



1. The data type of the added variable should be consistent with the data type of the pointer; if an array is checked, the length of the array should also be consistent;

2. The index value range of the variable: 0-2147483647; if the associated index variable range is smaller than the range, then refer to the maximum value of the variable, for example: associated 16-bit unsigned, the range of 0-65535; the index value is not allowed to repeat;

3. Add a maximum of 1024 number of entries

6. Right-click on a variable entry to insert, cut, copy, paste, delete, multi-copy, select all, and so on;



1. If there are multiple selections (whether consecutive or not) are treated as one whole selected line and inserted below;

2. Allow copy and paste operations between members of pointer variables or between members of pointer variables;

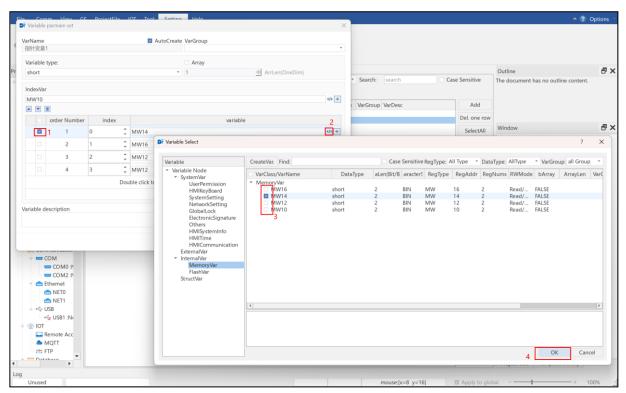
3. only supports the same data type or the same data type and the same length of the array between the copy and paste and other operations, does not meet the error will be reported;

4. Paste rules: select a line or select more than one line, according to the serial number to cover, the source selected lines is greater than the number of lines selected by the target, inserted in the target selected line below;

4. Multi-selected entries or do not meet the multiple copy specification (variable name does not end with a number at the end of the end), can not be multiple copy;

7. Click OK and the pointer variable is created successfully;

Variable selection window screen:



1. Check one or more variable entries to open the variable selection interface;

2. Display the variables allowed to be associated, keep the selected variables when switching the variable node Tab page, and add/modify all the selected variables when clicking OK;

3. After entering the variable selection window, the number of variables allowed to be checked is judged in real time, when there are more than 1024 entries, the variables are grayed out and cannot be checked;

4. Click the OK button to compare the modified items:

① The unchanged variables remain unchanged, and the changed variables are modified according to the serial number from the smallest to the largest;

② variable less than the previous checkbox, OK, clear the previously selected variable name, excess checkbox, according to the serial number from the smallest to the largest modified in the selected line below the insertion of the new

5. When multiple selection of pointer members associated with the same variable, if the variable has not changed, it will not change, if the variable has changed but the variable still exists, only the line with the smallest index value is retained

5.5 Structual Variable

Structual variables consist of a set of different data called members (or domains, or elements), where each member can have a different type. Note: When creating structural variables for the first time in the project, the data type needs to be created first.

Paste	AL AL D	略体 2.0 55 Reg I 旦 S				- Hmargin 0 - Vmargin 0		Width 1			Arrange
Clipboard Edit	DF Create new V	arible								×	
NET0:192.168.0.100	Variable set Var.Name: V StructVar1 DataSource: MemoryVar	AutoCreate			VarG	iroup:				2	se Sensitive Add
GlobalInterlock 3	Variable type: Struct1 R/W mode:		ct Addr.co SampleCycle:	ontinuous	Pri.:			SampleType:			Ael. one row
SystemalVar Monorphile Monorphile Monorphile	Read/Write Name Param1 Param2 Param3	DataType bit short int	DataLen 1 2 4	bArray FALSE FALSE FALSE	ArrLen	FALSE FALSE FALSE FALSE	ArrLen(Two 2 2 2	Reg.Type: MB Reg.Addr.: 0	✓ AutoMallo	- 01	Unselect el. multirow Import
FlashVar PointerVar StructVar VaribleGroup	Param4	int64	2	FALSE	1	FALSE	2	Format(Range DDDD(0-655 Datalen(bit)		18	Export all xport select Find
Communication connection Communication connection COM COM COM0:1:Modbus RT Device1:StationNo:1 COM1:Not Used	Tip:Addr. contin Variable descrip		mber's type co	ontains bit	and other	s,bit change t	and the second se	RegNums:			
Log	Help							ОК	Cancel		

- 1. Double click to open the list of structural variables
- 2. Add structural variables
- 3. Select variable type
- 4. Display all members under the corresponding data type

5.6 Variable Group

Variables can be grouped and managed in the project production.



📴 Create new Vari	ble						×
Variable set Var.Name: 🔽 Aut	to(Reg.Typ	e+Addr)	ſ	VarGroup:			
COM0_Device1_4>	(1_0						-
DataSource:			L				
COM0[Device1](M	lodbus RTL	J Extend)					
Variable type:	CharacterS	et: StringLen(Byte): 📄 UseAr	ray	🛄 UseTwol	Dim.Array	
char 👻	BIN	- 10	ArrayLen	2	2:2	2	
Reg.Type:	Reg.Add	r.Value:					
4X •	1.0						
Format(Range):		DataLer	ngth(Bit):		RegNum	s:	
DDDDD.D(1-6553	5).(0-1)	1			1		
R/W mode:		SampleCycle:		Pri.:		SampleType:	
Read/Write		1		normal	-	Normal	
Variable descriptio	n	"					

1. Right click on the parent node of the variable group to add a variable group.

2. Right click on the corresponding variable group to rename or delete it.

3. When adding variables from the variable list or opening variable properties, variable groups can be associated.

5.7 Data Type

Data type: Select the data type to be set, which can be an array. The supported types are listed in the table below.

Character set: Numerical values can be set to BIN, BCD, LSB. The default string is UTF-8, and can be set according to the

Data Type Name	Data Type	Data range				
bit	Bit	0~1				
Boolean value	BOOL	FALSE (0) ~TRUE (Nonzero number)				
8-bit signed integer	INT8	-128~127				
8-bit unsigned integer	UINT8	0~255				
16-bit signed integer	INT16	-32768~32767				
16-bit unsigned integer	UINT16	0~65535				
32-bit signed integer	INT32	-2147483648~2147483647				
32-bit unsigned integer	UINT32	0~4294967295				
64-bit signed integer	INT64	-2^63~2^63-1				
64-bit unsigned integer	UINT64	0~2^64-1				
Single-precision floating point	Float	3.4E-38~3.4E+38				
Double-precision floating point	Double	1.7E-308~1.7E+308				
Date	Date					
Date And Time	Date_And_Time					
Time of one Day	Time_of_Day					
Time	Time					
Long time	LTime					
Timestamp	Timestamp					
Channacter Stains	UTF-8、Unicode、U	Jnicode (High and low byte swapping) 、 GB2312、 GB2312 (High and low				
Character String	byte swapping) 、 E	xtended ASCII code、Extended ASCII code (High and low byte swapping)				
Customized						
Structures						

desired string type.

5.8 Addition/deletion/use of variables

5.8.1 Adding variables

Taking adding memory variables as an example, select Internal Variables - Memory Variables/Flash Variables, click Add/Batch Add, and the following figure will pop up:

GlobalSet	VariableType: MemoryVar		• HeaderEdit		
S HMITimer	VarClass/VarName	DataType	DataLen(Bit/Byte CharacterSet	RegType Reg/	Add
HMIAuthorize	MemoryVar				Batch Add
GlobalInterlock					Del: one roy
- SystemVar					SelectAll
e 📴 ExternalVar					SelectAll
COM0[Device1](Mo					Unselect
😑 🕐 InternalVar					Del: multiro
MemoryVar					
FlashVar PointerVar					Import
- StructVar					Export all
🗉 📑 VaribleGroup					Export selec
VarGroup1					Find
📮 📮 DataType					Eind
Communication connection					
e 📥 COM					
= COM0:1:Modbus RT					
Device1:StationNo:1					

Name		Description				
Variable name	A unique variable ide	entifier, with automatic generation checked by default (register type + address)				
Variable group	Set the group to whic to an empty group.	Set the group to which the variable belongs for easy subsequent filtering. It can be skipped and defaults to an empty group.				
Data source	Optional data sources	Optional data sources include memory, disk, and external controller.				
Array	By default, it is not checked. After checking, the array length can be set, and a two-dimensional array can be checked. Please note that the array length is less than the number of available registers.					
Register Type	Set the data type according to the selected data source					
Register	Default automatic allocation, can be unchecked and the register address can be manually changed.					
Address	Please note that the address cannot be duplicated.					
Read/Write mode	Set read-only/read write/write only attributes for variables.					
Variable Description	Explain the purpose of the variable					
Detail	Command mode 1. Prefix and index id set 2. Register name and address					
Batch establishment	Quantity	Number of variables created.				
establishiment	Same name or	1. Skip establishment				
	address	2. Delete reconstruction				

5.8.2 Deleting Variables

Delete one row: Delete variables from the currently selected row.

Delete muti-row: Delete the selected variable. You can hold down Ctrl and click on the variable you want to delete, or you can click on Select All.

egisterType: all type * DataTyj ariableType: MemoryVar	pe: all Type *	VarGroup: all Group	 Search: se 	earch	0	Case Sensitive
/arClass/VarName	DataType	DataLen(Bit/Byte	CharacterSet	RegType	RegA	Add
 MemoryVar test1 MW29 MW28 MW27 MW26 MW25 MW24 MW23 MW22 MW21 MW21 MW20 	The variable , are you sur	e cann't be retrieved a re to delete? <u>'es No</u> 1 1 1	X fter deletion BIN BIN BIN	MW MW MW MW MW MW MW MW	28 27 26 25 24	Batch Add Del. one row SelectAll Unselect Del. multirov Import Export all Export select Find

5.8.3 Export/import variable

Export: Export the currently created variables, including both export all and export selected items.

Import: Import a table of variables edited externally.

Note: The format of the imported table needs to have the DTP format. Otherwise, the import will NOT be successful.

First, choose the path to import the file, and then choose the method of handling duplicate variable names. The PLC variable import parameter is the external controller driver protocol that has already established a connection.

Dr in	nport Variable Param	×
Path:		
Proc	essing when variable nan	ne is repeated
0.	Update	💌 Skip
PLC	Variable Import Param	
ID	ProjectPLCInfo	FilePLCInfo
1	COM0[Device1]	
		OK Cancel



The communication connection is mainly used for communication with external controllers, including COM, Ethernet port, and USB.

For the connection and parameter settings of each drive, please refer to the communication manual.

6.1 Equipment management

According to your own needs, set common communication protocols to facilitate and quickly establish communication connections with external controllers.

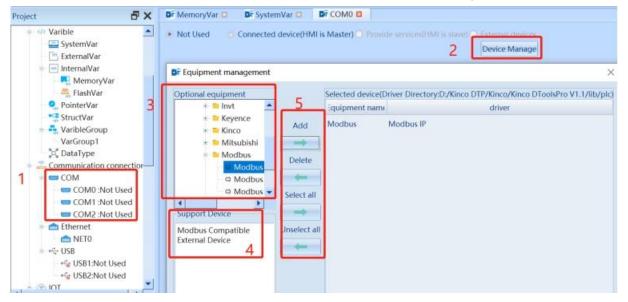
Select the corresponding communication connection method, taking COM as an example, double-click the corresponding COM port, click Common Device Management, and the following window will pop up:

Optional equipment: External controller protocols currently supported by HMI.

Support Device: PLC models supported by the currently selected protocol.

Selected Device: Display a list of commonly used devices selected, click "OK" to take effect.

NOTE: Unselect "SelectAll" will clear the selected devices, and it will take effect after clicking "OK".



6.2 COM

For applications related to various external driver protocols, please refer to the corresponding communication manual.

Kinco DToolsPro-Configuration editing software

Project 🗗 🗙	📑 B_1:Basic Window(1) 🖾 📑 COM0 💌		
HMI:F070E-Pro (800x480)			
🖃 🗘 SystemSet	Connected devices(HMI is master)		 Device Manage
HMISet			
NET0:192.168.0.100	Company	Protocol	
GlobalSet	Modbus *	Modbus RTU Extend	*
- 🏀 ProjectSet			
- 🖏 HMITimer	▼ Param		
🔤 GlobalInterlock	Default Advanced	Connection Doc	
⊡ Variable	CommunicationType Baud	Data	aBits
🖃 🍄 ExternalVar	RS485 * 9600	* 8	•
COM0[Device1](Modbus RTU Extend)	Parity StopBi	its	
🖃 🕐 InternalVar	NONE		
	NONE *	· ·	
	h Gurrant Davian		
PointerVar	Support Devices		
StructVa r	Communication status settings		
🕂 🔩 VariableGroup			
DataType			
🖃 🚘 Communication connection	Add Controller Number of controllers	s/PLC allowed 255	
	Number Controller Name	Settting	Operation
🖃 📟 COM0:1:Modbus RTU Extend		5	
Device1:StationNo:1	1 Device1	StationNo=1;	Set Delete

	Parameter Setting Description				
Communication type	com0: RS232/RS422/RS485 com1: RS422/RS232/RS485 com2: RS232				
Baud	Baud Maintain consistency with connecting slave stations				
Data Bits	Data Bits Maintain consistency with connecting slave stations				
Parity	Parity Maintain consistency with connecting slave stations				
Stop Bits	Stop Bits Maintain consistency with connecting slave stations				
Default	Restore communication parameters to system default parameters				

CommunicationTimeout		CharacterTimeout	
3	÷	1	÷
CommunicationInterval		CommunicatioMinCycle	
0	÷	0	÷
CommunicatioErrorRetries		CommunicatioErrorChecks	
1	÷	3	÷
CommunicatioNakRetries		CommunicatioNakChecks	
3	÷	3	÷
DeviceRetryInterval		DeviceMaxRetries	
3	÷	1	÷
MaxReadBlockWords		MaxWriteBlockWords	
32	÷	32	÷
MaxReadBlockBits		广播站号	
128	÷	65535	÷

	Advanced Parameter Description					
Communication Timeout	The time in seconds when the communication cannot receive correct message feedback					
Character Timeout	The time, in milliseconds, between the end of one character (stop bit) and the end of					
	the next character (stop bit)					
Communication interval	In millisecond					
Communication Error Retries	Number of requests after communication error					
Communication Error Checks Number of consecutive communication errors, triggering an error message						
Communication Nak Retries	Number of consecutive repeated requests after communication timeout					
Communication Nak Checks	Number of detections after communication timeout					
Device Retry Interval	The time interval between each reconnection request after communication					
	disconnection, in seconds.					
Device Max Retries	Number of device reconnections after communication disconnection					
Max Read Block Words	Indicates the maximum number of word registers per message read. Exceeding this					
	word count will result in multiple requests being split					
Max Write Block Words	Indicates the maximum number of word registers per message written. Exceeding this					
	word count will result in multiple requests					
Max Read Block Bits	Indicates the maximum number of bit registers per message read. Exceeding this word					
	count will result in multiple requests being split					
Broadcasting station number	As long as the device with the broadcasting station number sends a data frame, all					
	connected devices that support the broadcasting station number can receive it, but do					
	not reply.					

Project 🗗 🗙	DF COM0 🔀	System				
HMI:G2100E-WIFI(1024x600)						
😑 🗘 SystemSet	Connected devices(HMI is ma	ster)				 Device Manage
HMISet NET0:192.168.0.100	Company		Protocol			
GlobalSet	Delta		 Delta DVP 			*
ProjectSet	▼ Param					
- 5, HMITimer	* Faram					
GlobalInterlock	Default Adv	anced Connection Doc				
⊖ ↔ Variable	CommunicationType		Baud	DataBits		
 SystemVar ExternalVar 	R5232	Ŧ	19200	* 8		•
COM0[设备3](Delta DV	Parity		StopBits			
😬 NET0[设备1](Modbus I	EVEN	•	1	•		
 InternalVar InternalVar InternalVar 						
S FlashVar	Support Devices					
🔍 PointerVar	 Communication status setti 	ngs				
- 😘 StructVar	Read communication sta	115	V lise con	nmunication blocking		
DataType	neud communication sta			intention brocking		
Communication connection						
COM	Add Controller Numbe	r of controllers/PLC allowed 1				
设备3:StationNo:0						
COM1 :Not Used	Num		Settting		Oper	ation
COM2 :Not Used	1	设备3	StationNo=	U;	Set Delete	
ि +्यु USB प्रिटेश USB1 :Not Used		<i>a</i> • • •				
v v uSB1 :Not Used v			on status settings Descri		_	_
	n status	Only supports in	ternal variables, bit/poo	ol variables (bit		
v v uSB1 :Not Used v	n status	Only supports in		ol variables (bit		
v v uSB1 :Not Used v	ı status	Only supports in integer variables	ternal variables, bit/poo (8-64); Supports non a	ol variables (bit rrays and array	s (supports arr	ay elements an
v v uSB1 :Not Used v	n status	Only supports in integer variables the entire array	tternal variables, bit/poo (8-64); Supports non a y; multi-dimensional	ol variables (bit rrays and array	s (supports arr	ay elements an
v v uSB1 :Not Used v	n status	Only supports in integer variables the entire array communication,	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional 1- Communication;	ol variables (bit rrays and array arrays do not	s (supports arr cross dime	ay elements an nsions); 0- N
USB1 :Not Used	n status	Only supports in integer variables the entire array communication, Array bit variable	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the	ol variables (bit arrays and array arrays do not e entire array re	s (supports arr cross dime presents the co	nay elements an nsions); 0- N pontroller numbe
USB1 :Not Used	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional 1- Communication; e: The array index of the ble variable [0] represe	ol variables (bit arrays and array arrays do not e entire array re ents the maskin	s (supports arr cross dime presents the co g state of the	ay elements an nsions); 0- N ontroller numbe controller wit
USB1 :Not Used	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional 1- Communication; e: The array index of the ble variable [0] represents ble [1] represents the	ol variables (bit arrays and array arrays do not e entire array re ents the maskin	s (supports arr cross dime presents the co g state of the	ay elements an nsions); 0- N ontroller numbe controller wit
USB1 :Not Used	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional 1- Communication; e: The array index of the ole variable [0] represents (ble [1] represents the pon;	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communicatior	s (supports arm cross dime presents the cc g state of the status of the	ay elements an nsions); 0- N ontroller numbe controller wit controller wit
uSB1 :Not Used ▼	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional 1- Communication; e: The array index of the ble variable [0] represents ble [1] represents the	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communicatior	s (supports arm cross dime presents the cc g state of the status of the	ay elements an nsions); 0- N ontroller numbe controller wit controller wit
ve USB1 :Not Used ▼	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word variable	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional 1- Communication; e: The array index of the ble variable [0] represent ble [1] represents the oon; ble: For example, if the	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communicatior PLC protocol i	s (supports arr cross dime presents the co g state of the a status of the s associated wi	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite th 10 controller
ve USB1 :Not Used ▼	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and se Array word varia and an 8-bit unsi	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional 1- Communication; e: The array index of the ble variable [0] represent ble [1] represents the oon; ble: For example, if the gned array variable witt	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communicatior PLC protocol i h an array lengt	s (supports arr cross dime presents the co g state of the a status of the s associated with h of 2 is selec	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite the 10 controlle ted, variable [0
uSB1 :Not Used ▼	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represents the [1] represents the oon; ble: For example, if the gned array variable with the communication status	ol variables (bit irrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll	s (supports arr cross dime presents the co- g state of the s associated with h of 2 is selec er with the nu	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite ith 10 controlle ted, variable [0 mber 1; Variab
ve USB1 :Not Used ▼	1 status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th [0]. bit1 represent	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represe ble [1] represents the <u>o on;</u> ble: For example, if the gned array variable with the communication status	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll n status of con	s (supports arr cross dime presents the cc g state of the s associated wi h of 2 is selec er with the nu troller numbe	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite the controller wite the controller wite ted, variable [0 mber 1; Variab r 2, and so o
va USB1 :Not Used ▼	n status	Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th [0]. bit1 represent variable [1]. bit0	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represe ble [1] represents the <u>o on;</u> ble: For example, if the gned array variable with the communication status ents the communication	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll n status of con tication status o	s (supports arr cross dime presents the co- g state of the a status of the s associated wi h of 2 is selec er with the nu troller numbe f controller nu	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite ith 10 controller ted, variable [0 mber 1; Variab r 2, and so or
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ead communication		Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th [0]. bit1 represent variable [1]. bit0 [1]. bit1 represent	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represe ble [1] represents the <u>o on;</u> ble: For example, if the gned array variable with the communication status ents the communication	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll n status of con tication status of tatus of controll	s (supports arr cross dime presents the cc g state of the a status of the s associated wi h of 2 is selec er with the nu troller numbe f controller nu	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite ith 10 controller ted, variable [0 mber 1; Variab r 2, and so on mber 9; Variab
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ead communication		Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th [0]. bit1 represent variable [1]. bit0 [1]. bit1 represent When the blocking consistent with the	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represe ble [1] represents the on; ble: For example, if the gned array variable with e communication status ents the communication represents the communi- ts the communication status ng state is 1, the commun- he current non communi-	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll n status of con tication status o tatus of controllunication state is nication (no error	s (supports arr cross dime presents the cc g state of the a status of the s associated wi h of 2 is selec er with the nu troller numbe f controller nu er number 10; 5 0, and the cor or window pop	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite ted, variable [0 mber 1; Variab r 2, and so o mber 9; Variab nponent effect s up); When th
ead communication		Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th [0]. bit1 represent variable [1]. bit0 [1]. bit1 represent When the blocking consistent with the blocking status in	ternal variables, bit/poo (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represe ble [1] represents the o on; ble: For example, if the gned array variable with the communication status ents the communication represents the communi- ts the communication status ng state is 1, the communi-	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll n status of con tication status o tatus of controllunication state is nication (no error	s (supports arr cross dime presents the cc g state of the a status of the s associated wi h of 2 is selec er with the nu troller numbe f controller nu er number 10; 5 0, and the cor or window pop	ay elements ar nsions); 0- N ontroller numbe controller wite controller wite ted, variable [0 mber 1; Variab r 2, and so or mber 9; Variab nponent effect s up); When th
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ead communication		Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th [0]. bit1 represent variable [1]. bit0 [1]. bit1 represent When the blocking consistent with the blocking; Only supports in	ternal variables, bit/pod (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represents the [1] represents the oon; ble: For example, if the gned array variable with the communication status ents the communication represents the communi- ts the communication status ing state is 1, the communi- te current non communi- s 0, the communication ternal variables and dis-	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll n status of con tication status o tatus of controll- mication state is nication (no error status is read in sk variables;; S	s (supports arr cross dime presents the cc g state of the a status of the s associated with h of 2 is selec er with the nu troller numbe f controller nu er number 10; 5 0, and the cor or window pop n real-time; 0-	ay elements ar nsions); 0- N ontroller number controller with controller with controller with controller with the controller the controller the controller of controller of controller the controller of controller of controller of controller the controller of
USB1 :Not Used		Only supports in integer variables the entire array communication, Array bit variable The array variable number 1; Varia number 2, and so Array word varia and an 8-bit unsi bit0 represents th [0]. bit1 represent variable [1]. bit0 [1]. bit1 represent When the blocking consistent with the blocking; Only supports in	ternal variables, bit/pod (8-64); Supports non a y; multi-dimensional <u>1- Communication;</u> e: The array index of the ole variable [0] represe ble [1] represents the oon; ble: For example, if the gned array variable with the communication status ents the communication represents the communi- ts the communication status ing state is 1, the commun- he current non communi- s 0, the communication	ol variables (bit rrays and array arrays do not e entire array re ents the maskin communication PLC protocol i h an array lengt s of the controll n status of con tication status o tatus of controll- mication state is nication (no error status is read in sk variables;; S	s (supports arr cross dime presents the cc g state of the a status of the s associated with h of 2 is selec er with the nu troller numbe f controller nu er number 10; 5 0, and the cor or window pop n real-time; 0-	ay elements ar nsions); 0- N ontroller number controller wi controller wi controller wi ith 10 controller ted, variable [0 mber 1; Variab r 2, and so o mber 9; Variab nponent effect s up); When th Not blocking; rrays and array

Serial port connect to external device (printers):

Project 🗗 🗙	Br B_1:Basic Window(1) ☑ Br COM0 ⊠	
	External devices(HMI connecting peripherals)	Manag
HMISet	Company Protocol	
- 😡 GlobalSet - 🔏 ProjectSet	BRIGHTEK • WH-E58KRH01_COM	
- 🖏 HMITimer - 📴 HMIAuthorize - 🗔 GlobalInterlock	Default Connection Doc	
⊡ Variable	CommunicationType Baud DataBits	
- 🐡 ExternalVar	RS485 • 9600 • 8 Parity StopBits • • • •	*
- 📑 MemoryVar - 🍣 FlashVar	NONE 1	
– 🥝 PointerVar – 📲 StructVar	Support Devices	
- 💑 VariableGroup - 🙀 DataType	▼ Output Setting	
 □	Print Size Printer Status () Window original size MW0	+
COM0:1:WH-E58KRH01_COM		

Printer status: After checking, the value of the corresponding register can be used to view the running status of the printer.

Output Setting	
Print Size Window original size MW0 =0:	: Not ready yet, =1: Initialize, =2: Ready, =3: Printing, =4: Canceled

✓□□○G♂~☆	ны	0		123
A 🖪 🏥 🚢 🗖 🗝 🌣 🔹	Set	Lamp	Switch	DataDisplay
Draw		Bit Set	-	Y
Project	123	Word Set	t	B
🖃 🔲 HMI:F070E-Pro (800x480)	•	Window	Set	
🖃 🗘 SystemSet	-	System C)peration (Set
🖃 🔟 HMISet	C	Transfer S	Set	
NET0:192.168.0.100	B	Conditior	n Set	
👩 GlobalSet	-	User Peri	mission Se	t 📃
	A	Recipe A	ction Set	1
🖏 HMITimer	♣.	Alarm Eve	ent Log Ad	tion Set
HMIAuthorize	÷c	Macro A	ction Set	
GlobalInterlock	2	Browse F	ile Set	
	-	DataBase	e Action Se	t
SystemVar	FTP	FTP Actio	n Set	
🖙 ExternalVar		Print Win	dow Set	

댥 Action Set		×
ButtonDown	r	
window number		
specified window	 B_1:Basic Window(1) 	Ŧ
specified window dynamic window	print direction	
COM0(WH-E58KRH01_COM)	vertical	*

Supports printing of specified windows and dynamic windows. The dynamic window assigns the corresponding variable to the window number to be printed. For the printer connection manual, please refer to the "ConnectionDoc" for details.

External devices(HMI conn	ecting peripheral	5)			Device Mana
Company		Protocol			
BRIGHTEK	*	WH-E58KRH01_CC	ЭМ		
▼ Param					
Default Co	nnection Doc				
CommunicationType	Baud			DataBits	
RS485	- 9600		*	8	
Parity	StopB	its			
NONE	* 1		٣		
Support Devices					
 Output Setting 					
· Output Setting					

6.3 Ethernet port

For the application of various external driver protocols, please refer to the corresponding reference manual Communication method: UDP 、 TCP

1:1CommunicationIntervalCommunicatioErrorRetries1:1CommunicatioErrorChecksCommunicatioNakRetries3:0CommunicatioNakChecksDeviceRetryInterval3:3	ommunicationTimeout		CharacterTimeout	
1:1CommunicatioErrorChecksCommunicatioNakRetries3:0CommunicatioNakChecksDeviceRetryInterval		:	1	
CommunicatioErrorChecksCommunicatioNakRetries3:0.CommunicatioNakChecksDeviceRetryInterval	ommunicationInterval		CommunicatioErrorRetries	
3 : 0 CommunicatioNakChecks DeviceRetryInterval		:	1	\$
CommunicatioNakChecks DeviceRetryInterval	ommunicatioErrorChecks		CommunicatioNakRetries	
		\$	0	4
3 : 3	ommunicatioNakChecks		DeviceRetryInterval	
		:	3	:
DeviceMaxRetries MaxReadBlockWords	eviceMaxRetries		MaxReadBlockWords	
1 256		:	256	2
MaxWriteBlockWords MaxReadBlockBits	axWriteBlockWords		MaxReadBlockBits	
256 \$ 4096	56	;	4096	÷

Advanced Parameter Description			
Communication Timeout	The time in seconds when the communication cannot receive correct message feedback		
Character Timeout	The time, in milliseconds, between the end of one character (stop bit) and the end of the		
	next character (stop bit)		
Communication interval	In millisecond		
Communication Error Retries	Number of requests after communication error		
Communication Error Checks	Number of consecutive communication errors, triggering an error message		
Communication Nak Retries	Number of consecutive repeated requests after communication timeout		
Communication Nak Checks	Number of detections after communication timeout		
Device Retry Interval	The time interval between each reconnection request after communication disconnection,		
	in seconds.		
Device Max Retries	Number of device reconnections after communication disconnection		
Max Read Block Words	Indicates the maximum number of word registers per message read. Exceeding this word		
	count will result in multiple requests being split		
Max Write Block Words	Indicates the maximum number of word registers per message written. Exceeding this		
	word count will result in multiple requests		
Max Read Block Bits	Indicates the maximum number of bit registers per message read. Exceeding this word		
	count will result in multiple requests being split		

6.4 USB

Supports drive-free devices such as RFID, Barcode scanner and printers.

Kinco DToolsPro-Configuration editing software

Project	8×	Dr B_1:Basic Window(1) 🖂 Dr USB1 🔀	
Communication connection		External devices(HMI connecting peripherals) Company BRIGHTEK WH-E58KRH01_USB	
 □ m Ethernet □ m NETO □ + USB 	۱ ۲	Support Devices Output Setting	
B ⊷ USB1:1:WH-E58KRH01_U Device1	SB	Print Size Printer Status Window original size	+

7 Window Screen

"Window" is a fundamental element of an HMI project, and each screen is composed of several windows. With a window, various elements, graphics, and text can be placed on the HMI interface.

7.1 Types of windows

According to different functions or usage methods, windows can be divided into 6 types: Power-on screen, public window, basic window, keyboard window, system window, and screensaver window. The basic window can be used as a pop-up window or as an underlying window. The specific instructions are shown in the table:

Window Type	Description
Power-on screen	The screen displayed during HMI startup. Users can customize according to their needs.
	The basic window is the most commonly used window. When using [Button] — [Switch
	Basic Window] or global control to switch basic windows, the current screen will be cleared
Basic Window	(except for public windows), and the basic window to switch will be displayed on the current screen. When an element on the basic window calls a pop-up window, the basic window remains open, and the original information on the window is retained. The called pop-up window is attached to the current basic window, and all pop-up windows are parent-child windows. When switching from basic window N to basic window M, all sub windows on window N can be set to close or continue to be retained.
Public Window	The elements of this window will be displayed on other windows, but do not include pop-up windows. Usually, elements that are common to each window are placed in a public window.
Keyboard Window	This window is mainly used to set various keyboards and will be displayed on other windows.
System Window	This window is generally used to place multiple preset system operation windows, such as error prompts, user login, electronic signatures, and communication information.
Popup Window	Popup windows are all attached to the current basic window. You can set whether to automatically close child windows when the parent window is closed.
Screen Saver Window	When screen saver is enabled and HMI is not operated within the set time, this window will automatically pop up to prevent misoperation.
	This window is generally used to place common elements that multiple windows need to call.
Bottom Window	Using the underlying window eliminates the need to repeatedly edit the same elements. For
	example, background graphics, charts, titles, etc.

A screen can contain both basic and public windows, and each basic window can contain multiple bottom and pop-up windows.

There is a certain limit on the number of windows in each project, as shown in the table below:

Window Type	Default window number	Maximum number of supported windows
Power-on screen		1
Basic Window	1	Window number range: Basic window 1~30000
Public Window		1
Keyboard Window	40001	40001-40006
System Window		A single window can have up to 3 bottom windows
Popup Window		Unlimited until memory runs out
Screen Saver Window	30001	Window number range:30001-40000
Bottom Window	51001	1

7.2 Start Page Settings

The start page setting is the first setting when the screen is turned on, and users can set it according to their needs. The setting interface is shown in the following figure:

🛱 Start Pa	ge Settin	9		?	×
	ortimage		Preview		
Cente	er Image				
Full sc	een Imag	e			
Use Image	Original	Size			
Back C	olor	-	2000 (Line)		
Image Po	s				
х	0	-			
γ	0	\$			
lmage Siz	e			5	
Width	1024	÷			
Height	600	÷			
			ок	ancel	

The specific setting instructions are shown in the table below:

	Instructions for Start Page Setting			
Import image	Import startup screen images, supporting image formats of *. png *. jpg *. jpeg *. bmp			
Center image	Click to put the image in the middle of the window			
Full screen image	Click on it and let the picture spread all over the window			
Use Image Original Size	After clicking, the image will be displayed in its original size on the window			
Background Color	Select the background color of the window after selecting the image			
Image position	Modify the coordinate position of the image on the window. The top left corner of the window is the origin position, the right is the X coordinate, and the bottom is the Y coordinate			
Image Size	Modify the width and height of the image on the window, with horizontal width and vertical height			



The X – coordinate plus width must be less than or equal to the screen width, and the Y – coordinate plus height must be less than or equal to the screen height.

7.3 System Window

After creating a new project, the project comes with 6 default system windows and 3 keyboard windows. You can see it in the

project structure window, as shown in the following figure:



The specific description of the default window is shown in the table below:

Window number	Window Name	Description
30001	Decimal numeric keyboard	Decimal numeric keyboard. Default pop-up numeric keyboard for decimal input
30002	Hexadecimal numeric keypad	Hexadecimal numeric keyboard. Default pop-up numeric keyboard for hexadecimal input
30003	ASCII character keyboard	String keyboard, default pop-up character keyboard for character input
40001	Communication Message Alert	Pop up message window when external controller error occurs
40002	System information prompt	System information prompt
40003	User permission login	Automatic pop-up window for user permission login. For more information on user permissions, please refer to <u>(11.2.2 User Permission Information)</u>
40004	Operate Confirm	Automatic pop-up confirmation window for operation control
40005	Electronic signature operator confirmation	The electronic signature operator confirms the automatic pop-up window. For more information on electronic signatures, please refer to [18. Electronic Signature]
40006	Electronic signature verifier	Electronic signature verifier confirmation automatic pop-up window

7.4 Editing Window

7.4.1 Create a new window

New projects have one window by default, and users can add several new windows in the following two ways.

• Double click [New Basic Window] on the project management tree

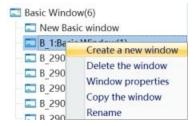
+



• Click on the [New Window]

icon in 【View】

• Right click on the project management tree window and select New Window as shown in the following figure:



Double Click [New Basic Window], Menu - View [NewWindow] and right click on 'New Window' will automatically pop up the [New Window] page.

New Window					?
Base Property Back I	Border Window Contro	ol			
Window Description:	Basic Window	Width: 1024 🗘	Height: 70	58 🗘	
Numbering Method:	🖲 Vacancy 🛛 💿 Last	💿 Custom 🛛 Insert Wir	ndow Number(exist	ted, all behind num	ber add or
Window Number:	Basic Window	2	Window U	nified Number:2	
	Basic Window	Safe	Window U	nified Number:2	
	Basic Window				nistrators
Window Number: Overlay Window Bottom Level: Middle Level:		- Safe		0:Admi	nistrators

The specific description is shown in the table below:

Name		Description
Numbering Method	Vacancy	When the existing window numbers are not continuous, a new window can be inserted into the first vacant position automatically recognized by the system, and [Vacancy] is selected by default.
	Last	When creating a new window, the system will automatically set the window number to the maximum window number that currently does not exist.
	Custom	Create a new window at any location, with customizable window numbers ranging from 1 to 30000, but cannot be an existing window number.
	Insert Window Number	After selection, you can create a new window in any position, and the window number can be customized. If the defined number already exists, add 1 to the window after this number in sequence.
Window Number		Display the number of the new window. When the numbering method is selected as [Vacancy] or [Last], the window number will be grayed out and can only be modified by selecting [Custom] or [Insert Window Number].
Window Des	scription	User defined or system default.

7.4.2 Open Window

After creating a window, you can open it in the following ways:

- Double-click the window you want to open in the window list of the [Project Management Tree]
- You can click to switch above the already opened window, as shown in the following figure

Comm View C public windows C GE Resad win C GE Touch area C GE	Name Grid	dettar 🦞 Projec	t 🕑 WinProview 🖓 Wie	tline LogEdit NewWi	Rest				A O Options
Display	E x	on Public Window C	Funcation DF 8 1:Basic Window	Window	Rest			Window	a 2
HMI57104E-Pro(102) OSystemSet SystemSet GlobalSet Set GlobalSet Set GlobalSet Set GlobalInterdo OVarible SystemVar ExternalVar CoMo(De InternalVar MemoryV StastVar VaribleGroup VaribleGroup VaribleGroup VaribleGroup VaribleGroup StructVar StructVar Communication COM	10.100	P	<u>, , 1960</u> , , ,	<u> </u>		720		8 1: 8 2: 8 2:	Vindow indow(7) Basic Window(8) Basic Window(8) Basic Window(2) N001:用户根语地(29002) N002:用户增估准(29003) N003:用户密码橡胶(29003) N004:提校到期(29004) N005:提校到期(29004) N005:提校到期(29005) rd Window(3)
F104E-Pro							mouse:tx=10	19 v=41	6 IIIIII O D 100

7.4.3 Copy the Window/ Batch Copy Windows

• Right click on the project management tree and select 'copy window' as shown in the following figure:

B_2:Ba-*	Create a new window
B_290	Delete the window
B_290	Window properties
B_290	Copy the window
B 290	Rename

Copy Window				? ×
Base Property Back B	order Window Contro	ol		
Window Description:	Basic Window	Width: 1024 🗘	Height: 768	:
Numbering Method:	🖲 Vacancy 👘 Last	🖱 Custom 🛛 💿 Insert Wir	ndow Number(existed	d, all behind number add one)
Window Number:	Basic Window	3	Window Unif	ied Number:3
Overlay Window		Safe		
Bottom Level:	null	🔹 🗾 User Pri	vileges:	0:Administrators *
Middle Level:	null	🔹 📰 User Sig	gn Out While Window	v Close

• In the Common menu of the project, select 【Copy Win】, as shown in the following figure:



Click on 【Copy Win】, as shown in the following figure:

📑 Copy de	lete window X
	n Type opy Widget : CopyNum 1 💽 💿 Delete Widget ndow parameter operation settings
	oy single window 💿 Copy Multiple windows
From	B 1:Basic Window(1)
То	B 1:Basic Window(1) -
Target wi	ndow ID setting
From	3 \$
То	4
То	4 OK Cancel

The specific description is shown in the table:

	Name	Description
Operation Type	Copy Widget: Copy Num	Select the copy window function and set the number of windows to be copied
Source Window	Copy single window	Select a single window number to copy
parameter operation settings	Copy multiple windows	Select the consecutive window numbers to be copied, from window M to window N, these several windows will be copied simultaneously
Target window II) setting	Set the starting window number for copying to. The target end window number is automatically generated by the system and cannot be changed



The target start window number can be an existing window number, but cannot be the window number being edited.

7.4.4 Delete the window/ Batch delete windows

• Delete the current window

There are two ways to delete the current window:

Click on the project management tree to select the window that needs to be deleted. Right click as shown in the following figure and select "Delete the window":

B_2	Create a new window
- 🖾 B_2	Delete the window
- 🖾 B_2	Window properties
- 🖾 B_2	Copy the window
- B_2	Rename

- Click to delete the window
- In the project common menu, select 【Copy Win】, as shown in the following figure:

 \triangleright

Comm	View	GE	ProjectFile	
+ 9 €	Select	€ M	nd/Replace Iuli Copy opy Win	A
oard		Ed	it	

Click on [Copy delete window] and select the delete window as shown in the following figure:

📴 Copy delete v	window ×
Operation Typ	e Nidget : CopyNum 1 🛟 🔹 Delete Widget
	action settings single window 🕐 Delete Multiple windows
From	B 1:Basic Window(1)
То	B 1:Basic Window(1) *
	OK Cancel

The specific description is shown in the table:

	Name	Description
Operation Type	Delete window	Select Delete Window Function
Delete window	Delete single window	Select the window number to delete
action settings	Delete multiple windows	Select the window number to delete. From window M to window N, and these consecutive windows will be deleted



1. Once the window is deleted, all elements in the window will be deleted and cannot be restored. Use this function with caution

2. Keyboard window and system window cannot be deleted

7.4.5 Rename

The window description can be modified except when adding or modifying a window. Right click on the project management tree window and select "Rename" as shown in the following figure to directly modify the window description.

B 2:Bari	Mindow(2)
L	Create a new window
B_290	Delete the window
B 290	
🖾 B 290	Window properties
B 290	Copy the window
B 200	Rename

7.5 Window Properties

7.5.1 Open the Window Properties Page

Kinco DToolsPro software provides three ways to set window properties.

• Right click on the project management tree and select "window properties" as shown in the following figure:

c Mindow(2)
Create a new window Delete the window
Window properties
Copy the window Rename

• Right click on any blank space within the window page to select "Window Property"

Paste	Ctrl+V
Select All	Ctrl+A
Add Vector Graphics	,
Add Components	,
Show Align Line	
Grid)
Window Property	

• Double click on any blank space within the window page to pop up "window properties".

7.5.2 Description of window property

Br Modify Window			? ×
Base Property Back Bord	ler Window Control		
Window Description:	Basic Window	Width: 10	24 🗘 Height: 768 🗘
Window Number:	Basic Window	2 :	Window Unified Number:2
Overlay Window			Safe
Bottom Level:	null	*	User Privileges: 0:Administrators
Middle Level:	null	•	📕 User Sign Out While Window Close
Top Level:	null	*	Shield Common Window Keybord Mapping
Help			OK Cancel
Dr Modify Window			? ×
Base Property Back Boro	der Window Control		
Background Purity Color	olor Select 💽 💽	Border Border W Border Co	
Pattern Fill			
💿 Gradient Fill			
© Picture			
Help			OK Cancel

Modify Winde	w						?	×
Base Property	Back Border	Window Control						
Order Num	Window State	Trigger Set	Execute Set	Execute Act	Enable Set	C	Add)i
							Delete	
							Clear	
							Modify	
							Сору	
							Paste	
							Enable	
							All Enable	•
Help						0	K Ca	ancel

The description of window properties is shown in the table:

	Window Property Description
Window Description	Each window can be named for easy differentiation
Width	Window width
Height	Window height
Window Number	The range of window numbers is 1-30000. The number can be set when creating a new window, and can be modified after creation
Overlay Window	Set the corresponding underlying window for the current window. The bottom window is placed at the bottom of the editing window as a background image. The underlying window must be a basic window that has already been created, typically placing components common to multiple windows on top of the underlying window
Safe	Set the security level of the current window
User Privileges	Set the user level of the window. Supports multi-privilege controlOnly users who meet this permission can log in and switch to this window
User Sign Out While Window Close	This function is used in conjunction with user permissions. After exiting this window, users who meet the permissions need to log in again before they can enter again
Shield Common Window Keyboard Mapping	This function is only valid for HMI with built-in buttons
Background	You can choose solid colors, pattern fills, gradient fills, or images as backgrounds. Images can be selected from a file or from a gallery
Border	Set the width and color of the border. The width range of the border is 0~16. When the border width is not 0, the border color selection is valid
Window Control	Trigger setting: The window status can be selected to execute when the window is opened/closed or when the window is running (consistent with the global control runtime setting). For more details, please refer to <u>Chapter13-Global Control</u>
	Action settings: consistent with global control Conditional enabling: consistent with global control

8 Elements (Components)

An/A element(component) is an object with which the user interacts to input or manipulate data. The user manipulates the object to perform a specific action. When using an element(component), the user needs to set the element properties according to the actual requirements. Different properties can directly affect the result of the elements' operation and execution. This chapter describes the properties of each element in detail.

8.1 Public settings

8.1.1 Creation and deletion of elements

(1) Create elements

Click on the 'element' menu, select the desired element from the toolbar, and the element's attribute box will pop up. After setting the corresponding properties, click the [OK] button in the properties dialog box and a "+" cursor will appear in the upper left corner of the configuration editing workspace. Move the mouse to the appropriate position and click the left mouse button to create and place it. Click the right mouse button to cancel the creation.

(2) Deleting elements

The created elements can be deleted in two ways:

• Delete by right-clicking

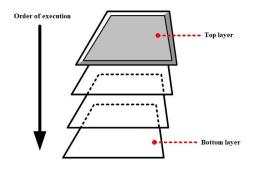
Select the element to be deleted, right-click, and then right-click [Delete] to delete the selected element.

• Delete through the Delete key on the keyboard

Select the element to be deleted, and then press the [Delete] button on the keyboard to delete the selected element.

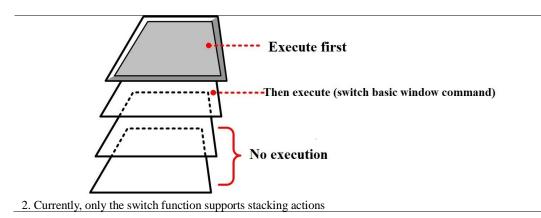
8.1.2 Execution order of elements

During the configuration design process, there may be situations where it is required to trigger multiple elements to execute corresponding operation commands with just one touch. In this case, multiple execution actions need to be added, and you can choose to execute them in sequence or all. Once there are touch actions, the superimposed actions will execute the operation commands according to the settings. The sequence of executing actions from top to bottom is uncertain. As shown in the following figure:





1. When encountering an element that executes the switch basic window command, after executing the switch basic window command, the commands for all components placed below that component will no longer continue to be executed.



8.1.3 The way to open the property

In addition to automatically popping up during creation, the element properties dialog box can also be opened for created elements in the following two ways:

- Double-click the element directly to open the element property window.
- Select the element, right-click, select 【Component Property】 to open the element property window.

8.1.4 Set switch functions

The GE (element)-Set page allows you to set multiple operating objects for elements.

SwitchFunction LampSet Label Grahics Touching Ena	No.	Action Exe	cution	Action	Description	
Display Set	Move Up	Move Down	Сору	Paste	Delete	Clear
	Add Function: Word	Bit	Window Operation	Macro	Condition	Recipe
l	Browse File Function execution n	Data Base node: • Run A	System Function	User Permission	Alarm/Event/Log	Run
	Continue to execu	ite the subsequent fur after function execution	actions after function ex on failure.	ecution failure.		

	Description of Switch Function Settings
Add function	Overlay and execute actions on switch functions
Function execution	Run All: All stacked execution actions are executed
mode	In Order Run: The stacked execution actions are executed sequentially from top to bottom
Continue to execute the subsequent functions after function execution failure	This option is only valid for sequential execution

Send notification after	Trigger notification register: can be associated with bit/word status variables. If an action fails to execute, change the variable status according to the setting to indicate the failure
function execution failure	Error Function Number Register: can be associated with word variables to display the function number where the error occurred on the set variable

8.1.5 Lamp set function

The bit/word indicator light of the element can be set in the GE(element)-Set page.

Switch[BL_0001]			
Label Dip Grahics Val Touching Ena Val	Enable MultiDisplay playMode: Register contr ariableType: Bit + Wo ariable:	ord •	
	ateNum: 1 *	the same time, the smallest state is valid	
	ConditionID Condition		
1	== 0	none	
2((error) other	none	
Inv	valid Input: 💿 Keep currer	nt state 💌 Display error text	
	Error Notify		
Help ID: 1	Describe:		OK Cance

	Indicator light function description
Enable MutiDisplay	Enable status indicator light
DisplayMode	Automatic loop and register control
VariableType	Supports Bits and Words
Multiple conditions meet at the same time, the smallest state is valid	Effective for word types
Invalid Input	Keep current state: When the input is invalid, keep the previous state of the incorrect input
in turo input	Display error text: Display the set error text when the input is invalid
Error Notify	It can be associated with a bit state variable, and in case of an error, set the bit variable to ON.

8.1.6 Label

Switch[BL_0001]			
SwitchFunction	V UseLabel	Label List	
LampSet	Text Edit	10	
	🔁 Language Independent	ID	Content
Grahics	Current Language: Chinese(Simplified Han) *	1	
Touching Ena	🙆 Use Text Lib	2	
Display Set	Direct input		
	Content	Display Set	tting
	Save content to text lib	Auto Ext	tend By Content
		Label Posit	
			el Position By Language Or State
		Horizonte	
	Save Content To	Vertical:	and a second sec
	All state All language All		
	Font Property	C Walking	g Lantern
	Import Font Template Save to Font Lib		
	Family: 阿里巴巴普惠体 2.0 55 Regular - Color - 🗹		
	Size: 16 * B I U Char spac 0 \$		
	Multi-line alignment: 🔳 🗃 📲 Line spac 0 🗘		
	Shadow		
	阿里巴巴普惠体 2.0 55 Regular Color ■ Color ● Color		
	Copy Current Font Property To		
	All State All Language All		
	An state An canguage An		
Help ID:	1 Describe:		OK Cance

	Label setting instructions
Enable labels after checking	g "UseLable"
Language independent	After checking, it does not change with language switching and is not checked by default. When unchecked, select a different language to input text.
Use Text Lib	By default, it is not checked, and the text content entered directly is used. After checking, select the text library content to use.
	All states: Synchronize the current text content to all states
Save Content To	All languages: Synchronize the current text content to all languages
	All: Synchronize the current text content to all states and languages
	Import font templates: Use templates from the font library
Font Property	Save to Font Library: Saves the currently set font properties to the font library, making it easy to call directly the next time you use it
Copy Current Font Property To	Copy font attributes to the corresponding location, consistent with the function of saving content section
Label List	Display labels in the current language and multiple states
	Automatic expansion of element size based on content: adaptive element size when label changes
Display Setting	Label position: Set the alignment method for element positions of labels according to requirements
	Walking Lantern: scrolling mode after data display exceeds the range

8.1.7 Graphics Setting

The graphics corresponding to the element status can be set on the **[**Graphics**]** property page of the element, which can be vector maps or bitmaps.

SwitchFunction LampSet	V Enable Graphics		
Label	k_button_00.vg		State: 0 * Size(100x100)
Grahics	Project Graphics Lib:		State Preview:
Touching Ena Display Set	button button button button	k_butto, k_frame k_lamp	State:0
		Add Graphics	Original size
	Import Graphics		
	Import Graphics Batch Import Picture	Delete	Import Picture

	Instructions for using graphic settings
Enable Graphics: Check	k to enable graphics
Import Graphics	Import the required graphics from the system library
Add Graphics	Add graphics outside of the system library
Original Size	Use the original size of the graphic
Batch Import Picture	Batch import of external images. Supported image formats include. jpg. jpeg. png. bmp
Delete	Delete the currently selected drawing
Import Picture	Import a single external image. Supported image formats include. jpg. jpeg. png. bmp
Shadow Effect	Add image shadow effect
Modify Fill	Modify the filling effect of the image

8.1.8 Operating condition setting

In the **[**Touching Enabled Setting**]** property page of the element, you can set the operating conditions of the element and the operating time. You can also set the function to notify or trigger touch.

SwitchFunction LampSet Label Grahics O Touching E Display Set	Touching Enabled Setting Always Valid Show Invalid Tag AlwaysInvalid Display Grayscale Font Conditional Enabline Auto show login window Permission Control User Permiss 0:Administrators Express Add	Security Setting MinPushDuration(100ms) 0 © OperConfirm wait(100ms) 30 MinPushInterval(100ms) 0 © RecordOper © Language Independent Current Language: Chinese(Simplified Han) * © Use Text Lib * Direct input
	ID Operation Express Parentheses	Save Content To All language Text lib Record data change Variable
		Notify Notify before write Notity write success Triger/Touch

		Instructions for Operating condition setting
	Always Valid	Check to indicate that the status value or data can be effectively written to the specified register by touching the active area of the current element
	Always Invalid	Check to indicate that even in the current element touch effective area, touch cannot effectively write status values or data to the specified register
Touching Enabled Setting	Conditional	Permission Control: A check indicates that the operator's user privileges need to satisfy more than one of the component's checked privileges before the current component can be touched and status values or data can be written to the specified registers. Auto show login window: Check to indicate that when the current user's permission ID does not meet the set permissions, a password input window provided by the system will
	Enabling	automatically pop up for the user to enter the password for login
		Express Control: Check to indicate that the current element can only be touched and the state value or data can be written to the specified register after the state of the positioning register or word register meets the set conditions. (False status indicates that it is valid when the condition is not met)
Show Invalid	l Tag	When checked, it indicates that the current element is in a touch invalid state, and the element displays an invalid flag.
Display Gray	vscale Font	Check to indicate that the element label is grayed out when the current element is in a touch invalid state.
	Min push Duration	The current element needs to be continuously pressed for no less than the set time before the status value or data can be effectively written to the specified register. The minimum unit is 100 milliseconds, and a value of 0 indicates that the minimum press time is not set
Security Setting	Oper Confirm wait	If checked, the HMI will automatically pop up an operation confirmation window when touching the current element. Clicking "OK" will write the status value or data to the specified register. If clicking "Cancel" or exceeding the set [waiting time] but the user does not confirm with "YES", the operation will be automatically cancelled. (It can be added to record data changes in a certain register during pressing)
	MinPushInte rval	The minimum time interval between two operations on the same element, with a minimum unit of 100 milliseconds. A value of 0 indicates that the minimum time interval for operation is not set
	Record Oper	Check this option to indicate that the action event will be logged. The recorded operation events can be displayed through the operation log element and archived in CSV file format in external storage devices

	Notify before write	The specified action will be executed before the current operation is successfully executed
Notify	Notify write success	The specified action will be executed after the current operation is successfully executed
	Triger/Touch	Mapping key or register corresponding operations

8.1.9 Display Set

On the "Display Set" page of an element, you can set the display conditions, size, and position of the element.

SwitchFunction	Location				Size				
LampSet	C Lock	X 1	0.0	(1	🗧 📰 Fixed Ratio	Width	100	C Height 10	00 \$
Label	Translucent								
Grahics			50		\$				
Touching Ena	Display/Hide								
Display Set	Always Display	-	0.8						
	Condition Displa Authority Control								
	 Authority Control Express Control 			ministrate					
	Express	I disc std	te more						
	Add De	elete 0							
	-								
	ID Operation	n Exp	ress	Parentheses					

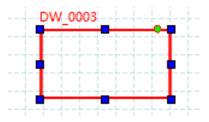
		Display Settings Description
	Lock	After checking, the element is locked. Once locked, the position of this element cannot be moved using the mouse or keyboard movement keys.
Location	X/Y	Coordinate value of the vertex at the top left corner of the element.
	Width/Heigh	The width and height of the element in pixels.
	t	
Translucent	After checking	g, the element translucency value can be set, ranging from 0 to 99
	Always	Check to indicate that the current element remains displayed
	Display	
		Permission control: Checking indicates that the operator's user permissions need to satisfy
Display/Hi		more than one of the component's checked permissions in order for the current component to
de	Condition	be displayed
	Display	Ex permission control: If checked, it indicates that the current element can only be displayed
		when the state of the positioning register or word register meets the set conditions (if the
		false state is valid, it indicates that the expression does not meet the requirements)

8.2 Plot

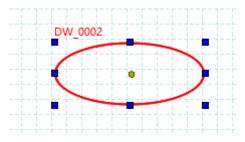
• Line: To draw lines, with one point at each end corner. Dragging it can directly modify the position of the line.



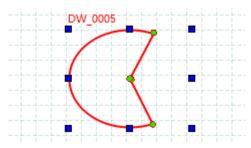
• Rectangle: It is a closed object that can be filled with background colors.



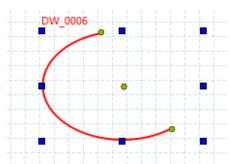
• Ellipse: It is a closed object that can be filled with background colors.



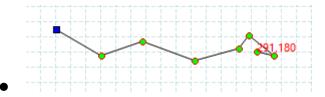
• Sector: Displayed as a percentage in a circular bar chart



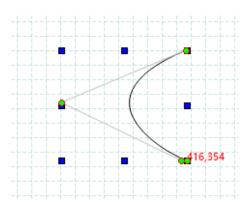
• Arc: Display the specified form in an arc



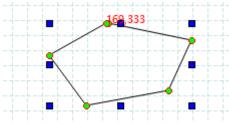
• Polyline: Consisting of interconnected segments. You can have any number of corners, each with a point. Drag directly to change its position. Although the starting and ending points may coincide on the same coordinate, the defined area cannot be filled.



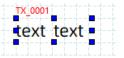
• Bezier: Display the Bezier curve. Each corner has a point. Drag directly to change its position.



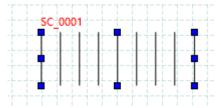
• Polygon: A closed object that can fill in background colors. Left click on a polygon in a simple control and form a cross cursor on the screen. Click on the left button and pull to create a polygon, and then click on the right button to end the creation. There is a point at each corner, which can be directly dragged to change the position of the polygon.



• Text: It can be used to add display text to other elements.



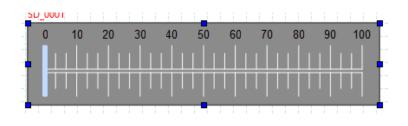
- Image: Click on [Image] to import graphics. The vector image is imported from the image library, and the external image is directly called for use when importing from a file.
- Scale: It can be used for labeling scaled quantities. In addition to using the built-in scale annotation, scale elements can also be used to label them.



• Table: It can be used to create options for displaying numerical values/text in a list format, enabling the alignment functionality of elements.



• Slide: It can be used to adjust the numerical value of a specified variable. If the value of a variable changes for other reasons, the slider of the slider component will also move to the actual value position of the variable. You can change the style so that the sliding direction can also be up, down, left, or right.



8.3 Switch/Light

The switch/light elements include switch functions, indicator lights, and switching operations.

8.3.1 Switch Function

The switch functions include bit set, word set, window set, system operation set, condition set, user permission set, recipe action set, alarm event log action set, macro action set, browse file set, and database action set.

8.3.1.1 Bit Set

• Bit set: When an element is pressed or ejected, it will change the state (on/off) of the bit register address of the specified variable, and the displayed state of the component will not change based on the written state value.

rigger Mode:	ButtonDown	
xecute Setting:	On	
/ariable:	On Off Inverse	
	On Pulse Off Pulse	

The description of bit setting function is shown in the table below

Туре	Description
	Press once and the specified address is ON. If the button is released or pressed again, it remains ON.
ON	Press and ON Press again still ON
	Press once and the specified address is OFF. If the button is released or pressed again, it remains OFF.
OFF	Press and OFF Press again still OFF
	Press once for ON at the specified address and remain ON when the button is released. Press again for OFF and remain OFF after releasing the button until the next press.
	Press and ON Press and OFF
Inverse	
	When the button is pressed, it is set to OFF and a negative pulse with a specified pulse width is generated. The pulse time ends and then it is set to ON. The pulse width can be set, and when pressed, it
Off Pulse	will generate the set pulse width. The PLC receives the OFF signal, with a minimum of 100ms. If the set value is too short, the PLC cannot reliably receive it due to communication or long scanning time, and the pulse width needs to be increased to the receiving time.

	When the button is pressed, it is set to ON and a positive pulse with a specified pulse width is generated.
	The pulse time ends and then it is set to OFF. Pulse width can be set. When pressed, a set pulse width is
On Pulse	generated, and the PLC controller receives an ON signal, with a minimum of 100ms. If the set value is
	too short, the PLC cannot reliably receive it due to communication or long scanning time, and the pulse
	width needs to be increased to the receiving time.

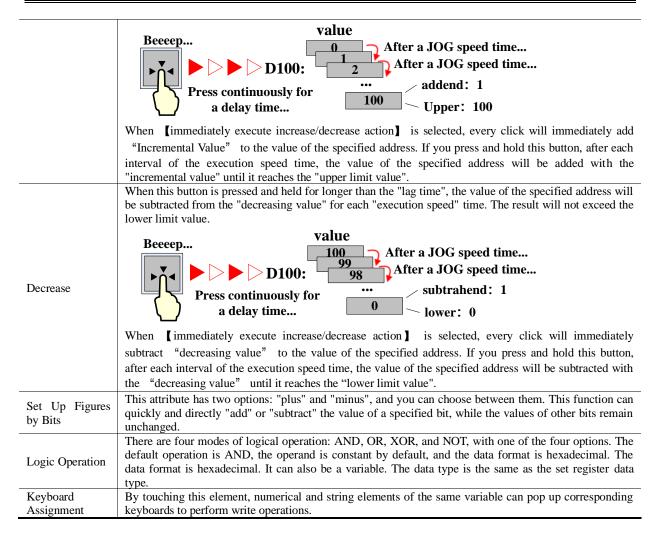
8.3.1.2 Word Set

• Word Set: When an element is pressed or ejected, the set value is written to the word register address of the specified variable, and the state displayed by the element does not change based on the written value.

Trigger Mode:	ButtonDown 👻
Execute Setting:	Direct Assignment
Variable:	Direct Assignment Add
Value:	Subtract Increase
	Decrease
	Set Up Figures By Bits Logic Operation
	Keyboard Assignment

[Word Set] function is shown below, There are 8 ways for [Execute Setting]. The description of each setting method is shown in the table below.

Туре	Description
Direct Assignment	Set the constant function. Touch control element that can write the set value to a specified register. Default :125 D100=125 Image: Control element that can write the set value to a specified register.
Add	Each press of this button will add an "addend" value to the value of the specified address. The result will not exceed the upper limit value. BeepBeepBeep D100: 2 upper: 100
Subtract	Each press of this button will subtract the "subtrahend" value from the value of the specified address. The result will not be lower than the lower limit value. BeepBeepBeep Value Value Subtrahend: 1 99 100 98 100 lower: 0
Increase	When this button is pressed and held for longer than the "lag time", the value of the specified address will be added to the "incremental value" for each "execution speed" time. The result will not exceed the upper limit value.



8.3.1.3 Window Set

• Window Set: It can be used to switch to a specified window, switch to the previous window, switch to a dynamic window, and automatically pop up a password window, without requiring variable binding operations. You can directly operate elements to trigger and execute specified functions.

Trigger Mode:	ButtonDown 💌
Set Up:	Switch Window 🗾
Specified window:	Switch Window Pop-up
Previous window	Close Pop Window
Oynamic window:	Return tous window Report cunt window
Automatic pop-up	Return toin window

The [Window Set] function is shown below, and there are seven ways to [Set Up]. The description of each setting method is shown in the table below.

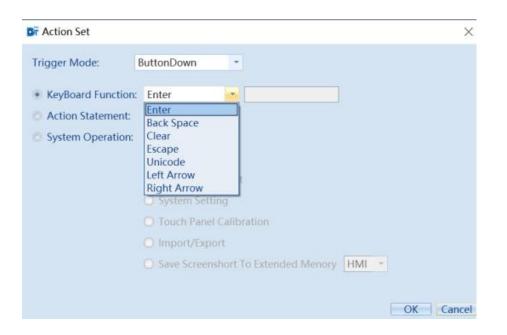
Operation Type		Description
Switch Window	Specified Window	Select the specified window and press to switch to the window interface

	Previous Window	Switch to the pre	
	Dynamic Window	values	indow variables and switch windows based on their
	Automatic pop-up password window		e permission to switch to the target window, you atic pop-up password window
		Specified Window	Pop up specified window
	Window No.	Dynamic Window	Bind dynamic window variables and popup windows based on variable values
		Center	Center the pop-up child window at the position of the parent window
	Location	Specify Coordinates	Display according to the set XY value
Pop-up Window		Use dynamic variable to display coordinates	Bind XY variables for dynamic position display
	Close pop-up window when parent window is closed	When checked, a	all pop-up windows on the current parent window ent window is closed
	Show title/Close button		bar and close button of the pop-up window, and the elevant content on its own
	Automatic pop-up password window	set the password	ve the permission for this pop-up window, you car window to automatically pop up
	Close the current pop-up window		only valid when the current window is a pop-up neans closing the current window
Close Pop-up window	Close the specified pop-up window	Select the specifi window	ied window and press to close the specified pop-up
	Close the dynamic window	Bind dynamic wi the variables	ndow variables and close pop-up windows based or
Return to previous window	Press to return to the previous	s window, this setti	ng has no effect on pop-up windows
Pop-up window control bar	Only valid for pop-up window	WS	
Report Current Window			e current basic window number into the variable
Return to main window	Return to the main window setting.	interface, which ca	an be modified in the global settings in the system
he description of the	type of pop-up is as follows		
	Desc	ription of type of p	op-up

Pop-up windo	bw type refers to the relationship between a pop-up window and adjacent windows
Monopolize	If [Monopolize] is checked, then when this window pops up, its parent window will be locked from further
Wonoponze	operations. And this popup window is always displayed at the top level of the parent window
Тор	The window is located at the top of all windows, the pop-up window is of this type by default

8.3.1.4 System Operation Set

• System Operation Set: It can be used to design keyboard buttons, set action states, and system operations, without the need to bind variables for operation. It can directly trigger the specified functions of the components.



The description of system operation set is shown in the table below:

Operation type		Description
Trigger Mode	Button Down	Execute action after pressing the button
mgger Mode	Button Up	Execute actions when the button pops up
	Enter/Backspace	Enter and backspace operations used as keyboards
Varboard	Clear/Escape	Clear and cancel operations used as a keyboard
Keyboard Function	Unicode	Used as a keyboard for Unicode encoding
Function	Left Arrow/Right	Left and right arrow keys on the keyboard
	Arrow	
Action	return	Execute return action
Statement	delay	Carry out delay action according to the set delay time, and the unit of time is
Statement		100ms
	Shutdown	Turn off the touch screen
System	restart	Restart the touch screen
Operation	Turn off backlight	Turn off the backlight of the touch screen
	System setting	Enter system settings operation

8.3.1.5 Data transfer settings

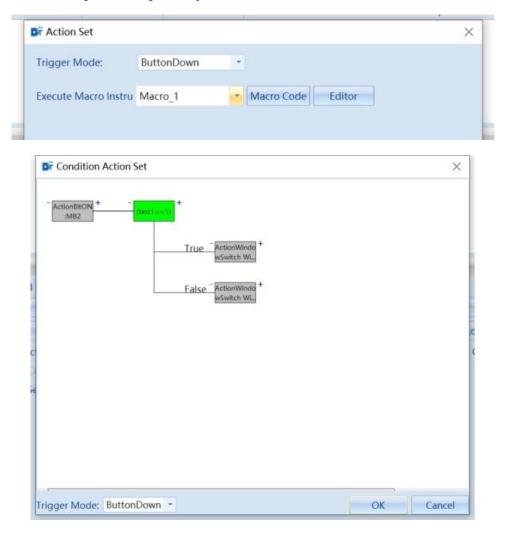
• Data transfer settings: realize batch transfer from source variable to target variable, commonly used for mutual data transfer between local screen and PLC.

	ButtonD	own *			
	Source v	ariable			
	No		Variable	name	Set
	1	MW0[0]			¢
		Mar 2017			
	Target va No		Variable	name	Set
	INO	•	variable	name	Set
		1.01/0101			~
	1	MW2[0]			0
/ariab	1 Leconfigura			С	K Cancel
				C Associate arr	▼ K Cancel
/ariab W0	le Configura		Num	Associate arr Detailed confi	W Cancel
VO	le Configura	ition	Num	Associate arr Detailed confi content	W Cancel
W0	le Configura Varia	ition		Associate arr Detailed confi content MW0[X]	WK Cancel ay variable iguration
W0	le Configura Varia	ition		Associate arr Detailed confi content MW0[X]	W Cancel
W0	le Configura Varia	ition		Associate arr Detailed confi content MW0[X] 'X' represen	WK Cancel ay variable iguration
V0	le Configura Varia	ition		Associate arr Detailed conf content MW0[X] 'X' represer Start value	WK Cancel ay variable iguration

	Description of data transmission properties
Source Variable	Sets the source address for data transfer
Destination variable	Sets the destination address of the data transfer
Configuration	Click the Configure button to enter the variable detail configuration screen
Associated Variables	You can select "Associated non-array variables" or "Associated array variables"
Number	When associating an array variable, you can increase the quantity according to the parameters set in the "Quantity Detail Configuration". Note: The number of variables column content display range: 1-2048
	If the associated is a two-dimensional array, the content part can be modified, for example, MW0[0][X], or MW0[X][0]
Detailed configuration	Start value: indicates the value of X at the content. For example, if the starting value is 3, the first entry in the right variable column shows MW0[3]
of quantity	Direction: can be set to "Incremental" or "Decremental"
	Interval: The interval value of each row of the array variable. The interval range is from "start value" to "array length"
Import	Import a data transfer table with a default file name of "TransferList. xlsx" and a type of xlsx; The pop-up window is called "Import Data Transfer" (the file name can also be imported without the input suffix. xlsx)
Export	Export the current engineering data transmission data. The exported file name defaults to "TransferList" or can be named by yourself, with the type xlsx. The exported file exists in the software installation directory
0	Two actions represent export data transfer and import data transfer, respectively.

8.3.1.6 Condition Set

• Condition Set: Configurable settings for simple "if" and "switch" macro commands to execute actions.



8.3.1.7 User Permission Set

• User Permission Set: It can be used to set permission actions, user variable addresses, and password variable addresses.

Trigger Mode:	ButtonDown	-	
	Have been a		
User permission:	User login		View user related system variables
User:	• Use user name		\$Set_User_Name
Password:	\$User Password		

8.3.1.8 Recipe Action Set

• Recipe Action Set: It can be used to set recipe actions, import recipe groups, import devices, import sub folders, import file names, encrypt files and handle conflict data.

Trigger Mode:	ButtonDown	7	
Recipe action:	Import recipe	-	
Import recipe group:		-	9
Import device:	HMI		📰 Use dynamic devic
Imported subfolder:			📰 Use dynamic subfo
Import file name:			🛛 🔄 Use dynamic file ni
Encrypt Password:	8888888		Dynamic password
Conflict data process	 Cover	ard	

8.3.1.9 Alarm Event Log Action Set

 Alarm Event Log Action Set: can be used to perform operations such as "Confirm all alarms", "Reset alarm statistics", "Restore alarm statistics", "Clear alarm history data", "Operator electronic signature", "Verifier electronic signature", "Clear operation log" and "Clear electronic signature".

F Action Set						
Trigger Mode:	ButtonDown -					
Mode:	Comfirm all alarms					
	Comfirm all alarms					
	Reset alarm statistics					
	Restore alarm statistics Clear alarm history data					
	Operator electronic signature					
	Verifier electronic signature					
	Clear operation log					
	Clear electronic signature					

8.3.1.10 Macro Action Set

• Macro Action Set: Can be used to set the execution of a specified macro instruction.

Trigger Mode:	ButtonDown	*			
Execute Macro Instru	Macro_1	~	Macro Code	Editor	

8.3.1.11 Browse File Set

• Browse File Set: Can be used to set the displayed folder path, file name, full path, and set file suffix.

		×
Trigger Mode:	ButtonDown -	
Folder path:		
🗾 File name:		
E Full path name:		
File suffix list:		
ADD DEI	ETE	
**		

8.3.1.12 Database Action Set

• Database Action Set: can be used to perform operations such as "insert", "modify", "delete", "query", "Import", "Export", "create a table", "delete a table", "clear table" and "user SQL" on existing databases.

📑 Action Set		×
ButtonDown	•	
Function Type	Return status variable	
Insert	·	
Sourse DataBase		
		*
		9
la cont Torres		
Insert Type		
Single 🔹		
Insert field setting		
	OK	Cancel

Description of Database Action Interface					
	Insert	Insert one or more rows of identical or different data			
		Insert Type	Contains both individual and batch inserts. Support variables during		
Operation			batch insertion		
Туре			Select single or multiple inserted fields. When selecting batch and		
-) F 0		Insert field	constant, the default input is multiple rows of the same data. The inserted		
		setting	data allows for fixed values and variable inputs. Variables can be array		
			variables and non-array variables. Insert as a single data when it is a non-		

			array data (length); Wł	ble. When it is the entire array variable, insert it as the entire (the number of inserts must be less than or equal to the array nen inserting a single array variable, insert the corresponding ata. The maximum number of inserts is 1000.		
		-	or more rows ata will be mo	s of data that meet the criteria. When no query criteria are odified. And when applying this feature, at least one field must		
		Modify Fields	Set the mod			
			Fixed Query	Fixed query criteria		
	Modify		Dynamic Query	Dynamic options: Only string variables are supported, such as the input option symbol '&'. Dynamic field: Only string variables are supported, such as		
		Use modify condition		input field name 'column1'. Dynamic condition: Only string variables are supported,		
			View	such as the input symbol ">". The set deletion conditions can be automatically generated		
			SQL	into SQL statements		
	Delete	Delete one or	more rows of	data that meet the criteria		
		Output the opt	tions that mee	et the conditions to variables		
		Query	Use Query Condition	When selected, query according to criteria		
			User order	Fixed sorting types are 'from small to large' and 'from large to small'. Fixed sorting channels select title blocks, dynamic sorting types and dynamic sorting channel setting variables		
	Query		Use custom SQL statement	When customizing a statement, the fields to be queried must match the fields of the output variable and comply with SQL syntax. When using SQL statements, sorting and query criteria cannot be used		
		Query Result Output	Row count variable	Returns the variable for the number of query rows		
			Accordin g to row	The query field setting must be an array variable corresponding to the data		
			Accordin g to column	1. Query report data into variables by row based on the selected fields		
		Importing dat		2. Query the number of report rows bles requires correct and existing file information to be set up		
		for successful		bles requires correct and existing the miormation to be set up		
	Import Import Import path Import Import filename	Import storage	Select the database table in the external storage device to import. You can check Use dynamic, associated word variable to set the import devi			
			dynamically Set the subfolder name for importing database tables. You can check Use dynamic, associate string variable to set the folder name dynamically			
		the file form	name of the imported database table, it can not be empty, and nat should be added after the file name, such as file name.csv. eck Use Dynamic, Associated String Variable to set the file nically			
			Encrypt file password c	orted database form requires password, you need to check e and set the correct password to import successfully. Dynamic an be checked, and the associated string variable can set the		
			password d	ynanneally		

•						
_	_	save database data to an external storage device. You can				
-		dynamic, associated word variable to dynamically set the				
devices						
Export path	dynamic to variable. If in the folde	ofolder name for exporting database tables. You can check Use set the folder name dynamically with the associated string the export is successful, the subfolder name will be generated er corresponding to the export device in the path of "disk" in root directory, and this item can be empty				
	Set the file	name of the exported database table, which cannot be empty.				
Export	This item	can be empty. You can set the file name of the exported				
filename	database ta	ble dynamically by checking the Use dynamic, associated				
	string variable					
Encrypted file	Check the box to export the file format is compressed, decompression of files need to enter a password to successfully decompress, if you do not check the [Encrypted files], the file format is exported in the [Export file format] option to set the file format, open the file directly					
The export						
file names contains a	Check the box to include timestamps in the exported file names					
-	Chaole the b	or to include the title has in the experted file				
-	Check the box to include the title bar in the exported file					
format	Set the file format of the exported database data, including CSV and PD					
	Export condition	Export that meets the export conditions				
Export	Export order	Fixed sorting type is divided into small to large and large to small sorting, fixed sorting channel selection title bar, you can select the dynamic sorting type and dynamic sorting channel setting variables, the exported file in accordance with the settings of sorting				
	Use	When customizing statements to conform to SQL syntax,				
	custom	you can use dynamic statements, associated string variables				
	SQL	to set statements dynamically. When using SQL statements,				
	statement	export sorting and export conditions cannot be used				
Transfer data from the source database table to the target database table						
		field data from the source database table to the corresponding				
All fields		e target database table				
D (1	By default, all fields are selected, and the fields that need to be					
	transferred can be set to transfer the data to the corresponding words in					
Fields	the target database table					
Attention:						
1. Currently, o	nly local pos	tgreSQL is supported for transferring to local postgreSQL				
2. The field names and data types of the source and target database tables must be						
consistent						
3.Both the sou	rce and targe	t database tables have transfer words				
Creating table	s in a databas	e remotely or locally				
Delete tables i	n remote or l	ocal databases				
Clear data from	n tables in re	mote or local databases				
Clear data from tables in remote or local databases When customizing a statement, the fields to be queried must match the fields of the						
	Export path Export path Export path Export filename Encrypted file names contains a timestamp Export title bar Export file format Export file format All fields Partial Fields Attention: 1. Currently, of 2. The field national consistent 3. Both the sout Creating tables in	storage devicescheck Use export devidevicesSets the sub dynamic to variable. If in the folde the project if attabase ta string variaExport filenameSet the file This item database ta string variaEncrypted file names contains a timestampCheck the file files need to files need to files need to files need to file names contains a timestampExport title barCheck the file formatExport file formatCheck the file formatExport file formatSet the file formatExport file formatExport conditionExport file formatSet the file formatExport file formatSet the file formatFaransfer dataUse custom sQL statementTransfer dataTransfer all fields in the fields in the consistentAttention: 1. Currently, orly local pos 2. The field numbers and data consistentJelete tables in remote or IDelete tables in remote or I				

Return status variable	Status values indicating whether the operation was successful: 0: initialization, 1: success, 2: failure.
variable	
Source Data	The original database can be a local database or a remote database
Base	

8.3.1.13 Ftp Action Set

Server settings: Add an FTP server in the left engineering column [IOT] - [FTP] column, set the server's IP, port number, username, password, and refer to <u>"9.3 FTP"</u> for detailed settings

🔺 DataType	FTP List 🕂 💼	Server Setting	
🖻 🚔 Communication connectic			
	1: Ftp_1 192.168.210.45	Fac. 4	
COM0 :Not Used		Ftp_1	
COM2 :Not Used		IP Address Dynamic Port	Dynamic
= 🧰 Ethernet		192 . 168 . 210 . 45 21	÷
🖃 🧰 NETO			· · · ·
Modbus IP:1		Using anonymity	
设备2:192.168.2		User name	Dynamic
🧰 NET1			
🖃 🔩 USB		admin	
- 崎 USB1:Not Used			
⊡ 😤 IOT		Password	Dynamic
Remote Access			ø
- MQTT			
FTP			

In the action settings, select the server in the FTP list above to support uploading and downloading actions

SwitchFunction					
LampSet			Execution	A star Descript	•
Label	No.	Action ButtonDown	Execution FTP Action	Action Descript	
Graphics	1	ButtonDown	FIP Action	Download;FTP Ser	rver: Ftp_1 192.168.210.45
Touching Enabled Setting	Di Action S	et			×
Display Set	ButtonDo	wn	* Select Actio	on Mode: FTP	-
	FTP Action				
	Download				-
	FTP Server				
	1: Ftp_1 19	92.168.210.45			* FTP
	Storage D	evice			Dynamic
	HMI				*
	Storage Pa	th			Dynamic
	StorePath				
	File Full Pat	th			Dynamic
	fullpath				
	Return Valu	ıe Variable 🔒			
	Return				
	Delete	source files ofter s	uccessful transfer	•	

	Description of Ftp Action Interface			
FTP Action	Support Dwonload、 Upload			
FTP Server	Select the server in the FTP list in the IOT- FTP column			
FTP Download:	 ①Storage Device: You can choose to store the files to be downloaded locally on the HMI or USB1 ②Storage Path: Store in the specified folder on the HMI, and create a new one when the folder 			
	does not exist			
	③File Full Path: The full path of the source file			
	④Delete source files after successful transfer: Pay attention to whether the currently logged in			
	user has write and delete permissions for the file on the server			
FTP Upload:	①Storage Device: You can choose to upload files locally on HMI or in USB1			
	②Upload Path:Upload to the specified folder path on the server			
	③File Full Path: The full path of the source file			
	Delete source files after successful transfer:After successful transfer, the source file will be			
	deleted			
Return Value Variable	After executing the FTP action, return the execution result of the action			
	0 Initial 1 File Transfer Successful 2 Connection Error (Port Error, Address Error, Network Error) 3 Username or Password Error 4 Source/Destination Path/File Does Not Exist 5 Disk Space Full 8 Unknown Error			

8.3.1.14 Print Window

Serial port and USB port can be set to connect external printer devices

Project	Β×	Dr B_1:Basic Window(1) 🗵 Dr COM0 🛛	
HMI:F070E-Pro (800x480)			
🗄 🗘 SystemSet		External devices(HMI connecting peripherals)	Device Mana
 □ HMISet NET0:192.168.0.100 □ GlobalSet - ProjectSet □ HMITimer □ HMIAuthorize 		Company Protocol BRIGHTEK VH-E58KRH01_COM	
GlobalInterlock		Default Connection Doc CommunicationType Baud DataBits	
🔄 ExternalVar		RS485 • 9600 • 8	Ŧ
🖃 🕗 InternalVar		Parity StopBits	
		NONE • 1 •	
😋 PointerVar 🃲 StructVar		► Support Devices	
- 🖡 VariableGroup DataType		▼ Output Setting	
🖻 🚠 Communication connection		Print Size Printer Status ()	
COM COM0:1:WH-E58KRH01_C	юм	Window original size MW0	+

Project 🗗	×	Dr B_1:Basic Window(1) 🖸 Dr USB1 🛛	
☐ 2 DataType ☐ 2 Communication connection	•	External devices(HMI connecting peripherals)	
 COM COM0 :Not Used COM1 :Not Used 		Company Protocol BRIGHTEK WH-E58KRH01_USB	
COM2 :Not Used		Support Devices Output Setting	
اً الله الله الله الله الله الله الله ال	B	Print Size Printer Status 🚯	
⊡ 😤 IOT		Window original size	÷

Switch[BL_0002]							>
SwitchFunction		ñ 🗈 😑					
LampSet	No.	Action	Execution	Action Description			
- Label	1	ButtonDown	Print Window	Print Window B_1:Basic Window	v(1)		
- Graphics - Touching Enabled Setting							
Display Set							
	Add Function:						
	Word		Bit	Window Operation	Macro	Condition	Recipe
	Browse F	ile	Data Base	System	User Permission	Alarm/Event/Log	Data Transfer
	FTP		Print Window				

Supports printing of specified windows and dynamic windows. For dynamic windows, just assign the corresponding variable to the window number to be printed.

📅 Action Set			>
ButtonDown	-		
window number			
specified window	-	B_1:Basic Window(1)	-
specified window dynamic window		print direction	
COM0(WH-E58KRH01_COM)	Ť	vertical	Ψ.

5 Action Set			×
ButtonDown	-		
window number			
dynamic window	Ŧ	MW0[0]	
print device		print direction	
COM0(WH-E58KRH01_C	OM) ~	vertical	Ŧ

8.3.2 Lamp Set

-

Bitlamp: used to display the 0 and 1 states of the pointer variable register, and the displayed content can be both label text and graphics.

Switch/LampSet[BL_0089]				×
SwitchFunction LampSet Label Graphics Touching Enabled Setting Display Set	Enable MultiDisp DiplayMode Register control * StateNum 2 <u></u>	VariableType Variable Bit bitarr3[0][0][0]		
	Condition List		Expand 🔻	
	ConditionID	Condition bitarr3[0][0][0]==Off	Setting Setting	
		bitarr3[0][0][0]==On	Setting	
Help ID: 89	Des	scribe:	OK Cancel	

Bitlamp description

		bit	Associated bit variables (including bit variables taken from words), displayed based on the status of the bit variables	
		statenum	Set the number of status display components, default 2	
display mode	Register control	Condition value reverse	Not checked by default, the condition values in the list will be swapped after being checked; For example, when the default condition ID=1, MB0=OFF; When condition ID=2, MB0=ON. After checking [Reverse Condition Value], when condition ID=1, MB0=ON; When condition ID=2, MB0=OFF.	
	expand	The "Flashing" and "Frequency" columns in the condition list have been changed to		
			be displayed in real-time when the extended column is selected;	
		[Settings] column is chec	ked by default, displaying values	
	Auto	statenum	Default 2, range 1-254, set the number of displayed	

	ndepende		component states
nt of reg	,	Frequency	Default 1, Range 1-99
control	selection)	Conditional control	Circle control with correlated bitvariables
		circle	

Wordlamp: will display the mapped status based on the value or offset of the specified word variable register, and the displa

yed content can be label text and graphics.

Dî	Switch/LampSet[BL_009
----	-----------------------

witch/LampSet[BL_0090]		
SwitchFunction	Chable MultiDisplay	
LampSet	DiplayMode VariableType Variable	
Label	Register control 🔻 Word 👻 MW1	
Graphics	StateNum Added status value type	
ouching Enabled Setting	2 \$\$ Status	
Display Set	Multiple conditions meet at the same time, the smallest state is valid	
	Condition List	Expand 💌
	ConditionID Condition	Setting
	1 MW1 == 0	Setting
	2 MW1 == 1	Setting
	3(error)	
	Invalid Input: O Keep current state Display error text	
	Error Notify	
	Describe:	

		Wordla	mp description
display mode	Register control	word	Display the mapping status based on the value or offset of the word variable register
		statenum	Default 2, range 1-254, set the number of states for the word status display component
		added states Value types	When it is in "state", the new condition is in "state", and the value of the new condition is the maximum value+1; When it is already the maximum condition value, subsequent additions will remain at the maximum condition value; When it is "bit", the new condition is to take a bit, and the new offset value is the maximum offset value+1; When it is already the maximum offset value; subsequent additions will remain at the maximum offset value;
		invalid input	Keep current state: Continue to maintain current valid state when invalid input occurs Display error text: Display the text label in the error state, which can be bound to a positional variable or string variable for error notification. If the input is invalid, set the positional variable to
			ON or output the corresponding character content; Otherwise, it will be OFF or cleared
		multiple conditions meet at the same time, The smallest state is valid.	
	expand	The "Flashing" and "Frequency" columns in the condition list have been changed to default hidden, and will be displayed in real-time when the extended column is selected; [Settings] column is checked by default, displaying values	
	Auto circle(Independent of register control selection)	statenum	Default 2, range 1-254, set the number of displayed component states
		Frequency	Default 1, Range 1-99
		Conditional control	Circle control with correlated bitvariables

circle

BitCombine: arranged according to the serial number to form a binary system (with a large serial number corresponding to a high position and a small serial number corresponding to a low position), converted to an unsigned decimal system, and dis played with the corresponding status and label based on the decimal value or offset.

SwitchFunction	Inable MultiDisplay							
LampSet	DiplayMode VariableType							
.abel	Register control	Register control * BitCombine *						
Graphics	StateNum Added status value type							
ouching Enabled Setting	4 C Status							
Display Set	Multiple condition	ns meet at	the same time, the smallest	state is valid				
	+ 🛅 🔺	Mini	mum of variables:2	Condition Li	st		Exp	oand 🔻
		Number	Variable	ConditionIE	Condition	Flash	quency(x100n	Setting
	_ 1		MB0	1	Bit Combine == 3	none		Setting
				2	Bit Combine == 2	none		Setting
				3	Bit Combine == 10	none		Setting
				4	Bit Combine bit0==ON	none		Setting
				5(error)		none		
	Invalid Innut: O I	Keep curre	nt state 💿 Display error te	xt				
	Error Notify							

		BitCor	nbine description
		BitCombine	Display based on decimal system composed of bit combinations
		statenum	Default 2, range 1-254, set the number of states for the word status display component
		added states Value types	When it is in "state", the new condition is in "state", and the value of the new condition is the maximum value+1; When it is already the maximum condition value, subsequent additions will remain at the maximum condition value; When it is "bit", the new condition is to take a bit, and the new offset value is the maximum offset value+1; When it is already the maximum offset value, subsequent additions will remain at the maximum offset value;
		Condition List	Cannot be empty, associated with bit variables, supports a maximum of 64
	Register control		The binary digit corresponding to subtracting one from the number of states must be greater than or equal to the number of rows in the variable table
display mode			the variable list (icon or right-click)Can add, insert, delete, copy, paste, etc.
			Keep current state: Continue to maintain current valid state when invalid input occurs
		invalid input	Display error text: Display the text label in the error state, which can be bound to a positional variable or string variable for error notification. If the input is invalid, set the positional variable to ON or output the corresponding character content; Otherwise, it will be OFF or cleared
			eet at the same time, The smallest state is valid.
	expand	hidden, and will be disp	requency" columns in the condition list have been changed to default played in real-time when the extended column is selected; [Settings] default, displaying values
	Auto circle(Independent	statenum	Default 2, range 1-254, set the number of displayed component states
	of register control	Frequency	Default 1, Range 1-99

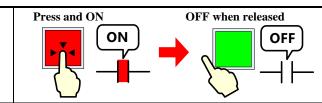
calentian) Canditianal control Circle control with completed hitserichles			
circle	selection)	Conditional control circle	Circle control with correlated bitvariables

8.3.3 Switch Operation

Bit switch: Bitwise operation can be performed on the bind variable, and the status displayed by the switch will be displayed according to the status of the read variable.

Grahics	Operator variable			State set		
Touching Ena		Read/Write variable different		State ID	Corresponding value	
Display Set	Read/Write: MB2			1	0	
	Switch property			2	1	
	Trigger action:	Down	-			
	Switch type:	Reverse				
	State number:	2	0			

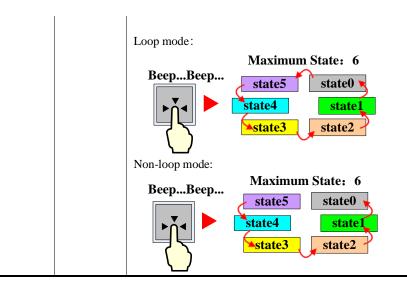
	Description of types of Bit Switch
Switch type	Setting Function Description
ON	Press once, the specified address status is ON. Release the button or press again, it remains ON. Press and ON Press again still ON
OFF	Press once, the specified address status is OFF. Release the button or press again, it remains OFF. Press and OFF Press again still OFF OFF OFF
Switch Property	Press once, the specified address is ON. Release the button, it remains ON. Press again to turn it off. After releasing the button, it remains OFF until the next press Press and ON Press and OFF OFF OFF OFF OFF
Reset switch	The specified address state is ON only when this element is pressed. It turns OFF when released.



Word switch: Word operations can be performed on bind variables. During operation, the corresponding state mapped data can be written to the specified variable register.

Grahics	Operator variable	State set			
Touching Ena	🖑 Read/Write variable different	State ID	Corresponding value		
Display Set	Read/Write: MW29	1	0		
	Switch property	2	1		
	Trigger action Down	3(Error)	other		
	Switch type: Plus • Not circle				
	State number 2 🗘				
		Invalid input:	Keep current state		
			🙁 Show error state		

		Word switch description
Control mode	Add	Each time this element is pressed, the status number is increased by 1. The specified write address will write the corresponding status mapping value, and the corresponding status graph will be displayed based on the value of the specified read address. Loop Mode: BeepBeep Maximum State: 6 state1 state4 state2 state3 Non-loop mode: Maximum State: 6 state0 state5 state1 state4 state2 state5 state1 state4 state2 state5
	Subtract	Each time this element is pressed, the status number is decreased by 1. The specified write address will write the corresponding status mapping value, and the corresponding status graph will be displayed based on the value of the specified read address.



List: Display the set number of states in the form of a list, and indicate the currently selected state by the selected color. It includes four types: list, dropdown list, tree list, and tree dropdown list.

Grahics	Oper property		📋 Drop	down list 📀 Tree list 💿 Tree drop down li		
Touching Ena Display Set	Operation Va Read/Wi Read:	riable rite same address MW26		Text Edit Language Independent Current Language: Chinese(Simplified Han) *		
	List Property			Use Text Lib Direct input		
		Component setting	qs -	Content		
	Line spacing:	5 \$		Save content to text lib		
	Select	- // - //		text0		
	Border	• 💌		Font Property Import Font Template Save to Font Lib		
	Program N 2	:		Family: 阿里巴巴普惠体 2.0 55 Regular * Color * 📝		
	pop-up: boun	ice down =		Size: 16 • B I U Char spac 0 Char spac 0 Char spac 0 Char space 0 Char		
	Marquee co	lor alone Font		Multi-line alignment: 🗉 🛎 📕 Line spac 0 🗘		
	Index	rresponding va	Label content	巴巴普惠体 2.0 55 Reg		
	0	0	text0	CC自恐体 2.0 55 Keg Offset: X: 4 \$ Y: 4 \$		
	1	1	text1	Copy Current Font Property To		
	2(Error)	Other		All State All Language All		

8.4 Data display

Element attribute settings:

		Description
Password display	If checked, re	place all numerical values with the * symbol
data tuna	Binary	The data is displayed in binary (0,1) format, with adjustable integer bits. For example, 16-bit data range: 0-65535
data type	Signed Decimal	The data is displayed in the signed Decimal (0-9) format; For example, 16-bit data range: -32768~32767

	Unsigned	Data is displayed in unsigned Decimal (0-9) format; For example, 16-bit data range:					
	Decimal Hexadecimal	0~65535 The data is displayed in hexadecimal (0-F) format, with adjustable integer bits; For example, 16-bit data range: 0~65535					
	Percentage	When the data type is Floating-point arithmetic, optional percentage display					
Leading zero		ber of digits obtained from input is less than the actual set number of digits, if checked, are the insufficient digits					
Display positive sign		en the data type is a signed Decimal number, if checked, a "+" sign will be displayed before the e					
Format	Set to numeric	cal or custom format, (percentage data type can only be in numerical format)					
Integer/decimal places	Decimal separ	Set the number of digits displayed before the decimal place and the number of digits displayed after the Decimal separator					
Max/Min value setting	range for num	Set the allowed data range for numerical input/display components. If "Variable" is checked, set the range for numerical input/display component data input/display as a variable and specify the register address for variable reading. The number of words in the register is related to the data width set by the component					
Using Input Deviation Control	values; When the con minimum valu configured minimum	a the control variable is in the ON state, the user input is not only limited by the maximum and num values, but also by the deviation value. For example, if the deviation value is 5 and the gured minimum value is 0 and the maximum value is 100, then when the current value is 50, the minimum value is 45 and the maximum value is 55. If the current value is 0, then the input range s time is 0-5, because the deviation exceeds the minimum value range, the minimum value shall					
Upper/lower		e of the specified variable is less than the lower limit value or greater than the upper limit nent will display the value in the current set color					
limit exceeding alarm	flicker	When the value of a fixed variable is greater than the upper limit or less than the lower limit, the element value will flash to highlight the warning effect of exceeding the limit					
	Scale conversion	It indicates that the displayed data is the data obtained after the original data calculated in a certain proportion. After checking and using, it is necessary to set th [minimum and maximum proportional values]. You can directly set a constant or us variables					
Enable	Zoom Conversion	It indicates that the displayed data is the data obtained after the original data is scaled to a certain scale. After checking and using, it is necessary to set the 【Gain】 and 【Offset】, which can be directly set as a constant or variable					
numerical calculation	Sub macro conversion	Write to PLC valueIndicates that the displayed data is written to the PLC value according to the data obtained after the sub-macro operation.HMI display valueIndicates that the displayed data is the data obtained from the original data after the sub-macro operation.					
	Logical calculation	The value after operation is equal to the monitored value and the data after constant/variable operation					
	shift	After calculation, the value is equal to the specified number of digits moved left/right by the monitoring value					

X For signed/unsigned Decimal and hexadecimal numbers, after the number of decimal places is set, the original data is moved to the left to display the corresponding Decimal separator position. However, the data actually written to the register is still the original data.

	Character Property Description
Single line display	The newline character in the string is displayed as a space, and the ASCII code (LF) of the newline character is 10 (0xA)
Multiline display	Set the total number of displayed lines, the number of displayed lines, and the number of characters per line

> Graphics: Can be used to set whether the control uses graphics and shadow effects.

k_button_00.vg Project Graphics Lib:		State: 0 • Size(100x100) State Preview:
button button button button- key101 warnin	k_butto k_frame k_lamp	State:0 State:1
Import Graphics	Add Graphics	Original size
Batch Import Picture	Delete	Import Picture

> Font property setting: Can be used to set the font of the label content displayed by the control.

Language Independent		
Current Language: Chinese(Simplified Har	n) 🝷 🚱	
Font Property		Label Position
Import Font Template	Save to Font Lib	Set Label Position By Language
Family: 阿里巴巴普惠体 2.0 55 Regular	🔻 🔳 Color 👻 📝	Horizonta 🛋 🕂 🛋
Size: 16 • B I U	Char spac 0 📫	Vertical: T 羊 🔟
Multi-line alignment: 🔳 🗧 🗏	Line spac 0 🗘	
	Shadow	
里巴巴普惠体 2.0 55 Reg	Ul Color: ■Colc · ✓ OffsetX: 4 ÷ Y: 4 ÷	

Description of font properties			
Language Independent	Checked by default, unchecked to set font properties for different languages.		
Set Label Position By	Uncheck the language-independent display box to set the horizontal or vertical position of		
Language	labels in different languages.		

> Display setting: Can be used to set the location, size, and display/hide of the control.

Location						Size					
C Lock	х	1	Ç Y	1	÷	Fixed Ratio	Width	100	🗘 Height	100	\$
Translucent											
transparency		50			0						
 Display/Hide Always Display Condition Displa 	iy 🗌 Do	not comn	nunicate wh	en hidden							

Keyboard setting property: This property is only valid for numerical input and character input components. Used to set whether to pop up the keyboard, the type and position of pop up, and whether to enable the "Use Input Order" function..

Automatic adjust position			
S KeyBoard pop-up position			
Specified position	X:	0	0
	Y:	0	¢
Not Use Pop-up Keyboard(Input by Not Use Pop-up Keyboard(Input by	y Map Key or Ext	ernal Keyboard)	
Use Input Order			

Touching Enabled Setting Property: This property is only valid for numerical input and character input elements. This can be used to set control touch enable, security settings, notification functions, trigger touch functions, etc.

uching Enabled Setting	Security Setting
Always Valid	OperConfirm wait(100ms) 30
waysInvalid	MinPushInterval(100ms) 0
Conditional Enabling	C RecordOper
	Language Independent
	Current Language, Chinese(Simplified Han) 🔹 🛅
	O Use Text Lib
	 Direct input
	-Save Content To
	All language Text lib

	Data Display Description
Numerical display	Display the data in the specified variable register in numerical form on the HMI.

Numerical input	Write data in numerical form from the HMI into the specified variable register, and assign values to the specified variable register by popping up the keyboard.
Character display	Parse the data within the specified variable in ASCII code and display it as a string on the HMI.
Character input	Parse the data into ASCII characters and write it as a string from the HMI to the specified variable register. At the same time, you can also assign values to the specified variable register by popping up the keyboard.

8.5 Alarm browsing

Alarm browsing components are components used to display user alarm information. Kinco DToolsPro provides components for displaying alarms, including alarm bar, current alarm, alarm history, and alarm statistic. Users can choose to use these components based on their functions and actual needs.

1. If there is a need to export background alarm information, it is necessary to check [Enable Alarm Record] and [Export Record] in [Project] - [Event/Alarm] - [Alarm Setting] in advance. Please refer to Chapter14: Alarm Setting for specific attribute descriptions of alarm settings.

2. The alarm information displayed in the alarm bar, current alarm, and other components should be established in advance in the [Project] - [Event/Alarm] - [Alarm Information Table].

3. The current alarm cannot save historical information, and only displays unrecovered alarm information. After the alarm is restored, it disappears.

4. Alarm history can save historical information and query function to query alarm history. In addition, it can display not only unrecovered event information, but also recovered event information.

8.5.1 Alarm Bar

The alarm bar is a one-way walking lantern. Scroll to display the alarm information content that has been established in the

[Alarm Information Table] and the current state meets the triggering conditions. Please refer to <u>Chapter14.3:Alarm</u> <u>Information Table</u> for specific attribute descriptions of alarm settings.

##	22-09-29	11:22:29

1. In the "Alarm Property" dialog box of the "Alarm Bar" component, corresponding properties can be set.

	Alarm Bar - Alarm Description
Alarm Type	Current component alarm type
Alarm Group	For specific attribute descriptions of alarm groups, please refer to Chapter 14 【Alarm Setting】
Include subordinate alarm groups	Include subordinate alarm groups
Alarm Level	For specific attribute descriptions of alarm levels, please refer to Chapter 14 【Alarm Setting】
Include higher levels	Contains higher levels
Sort Order	Gray display, invalid settings
Language independent	If checked, the selection box after "Display Language" is invalid, and the component defaults to using the first language
Show title bar	If checked, the alarm bar component will be displayed with a title bar. In addition, the settings related to the font of the title bar will also be displayed. There will be no explanation here for the time being. For instructions, please refer to the alarm attribute description in 8.5.2 [Current Alarm]
List font set	Set the relevant properties of the list font
Set font by column	If checked, the data table in the alarm properties will display the "Column Font Settings" content. Double click on the corresponding "Font Settings" to set the font properties of the corresponding column
	It includes two options: [Input Direct] and [Use Text Lib] :
	① When selecting 【Input Direct】, you can directly input the title name in the corresponding area
Preset text set	of the 'Title Bar Name Setting' column
1 tober tone bet	② When checking 【Use Text Lib】, you can select the name of the text library in the
	corresponding area of the 'Title Bar Name Setting' column. This item is only valid when [Show
	Title Bar is checked

	Set the language of the title bar. When [Language Independent] is not checked and [Show Title
Display language	Bar is checked, it is valid
Data column	Check to control whether the corresponding data column is displayed by setting a bit of the word
dynamic show	variable to ON or OFF
M	When selecting the row in the data table, click [Move Up] to move the selected row up. The
Move up	[Move Up] button is valid except for selecting the first row of the data table
Move down	When selecting a row in the data table, click [Move Down] to move the selected row down. The
wove down	[Move Down] button is valid except for selecting the last row of the data table
Default Sort	Restore to the original sorting of the data table
Dynamic set by	If checked, the "Dynamic Display" column will appear in the data table of the alarm property. By
column	first checking and then selecting the bit variable, you can control whether the corresponding data column is displayed through the state of this bit variable
Alarm Status Display	Set trigger colors and confirm colors. The color picker can absorb all colors on the computer screen at this time
Alarm Display type	Fixed to display the same alarm in different states on a single line, cannot be modified
Marquee Moving	When setting the alarm information trigger, display the movement mode of the alarm bar component
Mode	
Step size	Move the displayed alarm information by the number of pixels moved each time. The unit is pixels.
Step size	The larger the step size value, the faster the movement display speed
Frequency	The time interval between the last moved pixel and the next moved pixel of the displayed alarm information. The unit is 0.1 seconds. The higher the value, the slower the movement display speed
2 In the "Table Prop	arty" dialog how of the "Alarm Bar" component, corresponding properties can be set

2. In the "Table Property" dialog box of the "Alarm Bar" component, corresponding properties can be set.

		Alarm Bar - Table Property Description	
Current Page/		[Alarm Bar] component Invalid	
Page Up/Dov Button	wn Switch	Alarm components other than alarm bars are valid	
Display grid line		Set display borders, row split lines, and column split lines	
Border line type		Set the border line type	
Border line width		Set border line width	
Border color		Set the color of the outer frame, and the color picker can absorb all the colors on the computer screen at this time	
Separator line	type	Set Split Line type	
Separator line	width	Set Split Line type	
Sprt Color		Set the split line color. The color picker can absorb all the colors on the computer screen at this time	
Title backgrou	nd color	Set the background color of the title bar. The color picker can absorb all the colors on the computer screen at this time	
Table backgro	und color	Set the table background color. The color picker can absorb all the colors on the computer screen at this time	
Row gap		set row gap	
Column gap		set column gap	
Date Format		Set the format of the alarm message date	
Date Separator	r	Set the separator of the alarm message date	
Show 4-digit y	/ear	If this option is checked, the date of the alarm message will be displayed with 4 digits of the year, otherwise it will be displayed with 2 digits.	
Time Format		Set the format of alarm message time	
3. In the "Disp	olay Set" dial	og of the "Alarm Bar" component, you can set the corresponding properties.	
		Alarm bar-display set description	
Lock	Set whether the position of the component is locked		
Fixed ratio of width and height	Set the size of the component and calculate the corresponding width or height proportionally. The ratio is the ratio of width to height before selecting [Fixed Ratio].		
Translucent		borders, row split lines, and column split lines	
Display/Hid	Always dis	play: Check to indicate that the current component remains displayed	
e	Condition display: Includes permission control, expression control, no communication when components are		

 hidden, and false status takes effect
① Authority control:Support multiple permissions control, check that the operator needs to meet the
multiple permissions of the component to display the current component.
② Express control: Check to indicate that the current component can only be displayed when the state of the
specified bit or word variable meets the set conditions
③ Do not communicate when hidden: When the variables used by components are External variable, check
this option, and components will not communicate when they are hidden
④ False state work: Takes effect when in an error state

8.5.2 Current Alarm

Current alarm is used to display the alarm information content that has been established in the [Alarm Information Table] and the current state meets the triggering conditions. When the variable state of the alarm switches back to a non-alarm state, the alarm information will disappear, otherwise it will be displayed continuously. Please refer to <u>Chapter14.3 – Alarm</u> <u>Information Table</u> for the establishment of an alarm information table.

No.	Alarm content	Trigger date	Trigger time	larm cumulative numb
1	##	23-06-05	18:21:07	1

	Current Alarm – Alarm Property description
Alarm type	The alarm type of the current component
Alarm Group	For specific attribute descriptions of alarm groups, please refer to Chapter 14 【Alarm Setting】
Include subordinate	If this option is checked, the alarm component will display the lower-level alarm groups of the
alarm group	currently selected alarm group. If it is not checked, only the alarm information of the currently
	selected alarm group will be displayed. It is checked by default
Alarm level	For specific attribute descriptions of alarm levels, please refer to Chapter 14 【Alarm Setting】
Include higher levels	If this option is checked, the alarm component will display the superior alarm level of the currently
	selected alarm level. If it is not checked, only the alarm information of the currently selected alarm
	level will be displayed. It is checked by default
Sort Order	Set the sorting method for displaying alarm information on alarm components
Language independent	If checked, the selection box after "Show language" is invalid. The first language is used by default
	for the component
Show Title Bar	If checked, the alarm bar component will be displayed with a title bar. It is checked by default.
Title font set	Click to set the title bar font related properties, this is only valid when [Show Title Bar] is
	checked.
List Font same as title If checked, the font properties of the list are the same as those of the title bar.	
List font set	Set the related properties of the list font
	If checked, the data table in the alarm properties will display the "Column Font Settings" content.
Set font by column	Double click on the corresponding "Font Settings" to set the font properties of the corresponding
	column
	It includes two options: [Input Direct] and [Use Text Lib] :
Preset text set	(1) When selecting [Input Direct], you can directly input the title name in the corresponding
T Teset text set	area of the 'Title Bar Name Setting' column
	② When checking 【Use Text Lib】, you can select the name of the text library in the
	1

	corresponding area of the 'Title Bar Name Setting' column. This item is only valid when [Show
	Title Bar is checked
Display language	Set the language of the title bar. When [Language Independent] is not checked and [Show
Display language	Title Bar is checked, it is valid
Data column dynamic	Check to control whether the corresponding data column is displayed by setting a bit of the word
show	variable to ON or OFF
Dynamic set by	If checked, the "Dynamic Display" column will appear in the data table of the alarm property. By
column	first checking and then selecting the bit variable, you can control whether the corresponding data
containin	column is displayed through the state of this bit variable
	Check to set output variables for the data column, and the [Trigger Variable] and [Trigger
Output select row data	Type] are valid. Click on any alarm information on the alarm component, and when the trigger
to var	variable meets the set trigger type, the content of the data column will be displayed in the
	corresponding output variable
M	When selecting the row in the data table, click [Move Up] to move the selected row up. The
Move up	[Move Up] button is valid except for selecting the first row of the data table
	When selecting a row in the data table, click [Move Down] to move the selected row down. The
Move down	[Move Down] button is valid except for selecting the last row of the data table
Default sort	Restore to the original sorting of the data table
Alarm Status Display	Set trigger colors and confirm colors. The color picker can absorb all colors on the computer screen
Alarin Status Display	at this time
Alarm Display Type	Fixed to display the same alarm in different states on a single line, cannot be modified
Confirm Mode	Set the method for confirming alarm information, including clicking, double clicking, and long
Commin Mode	pressing
Unconfirm Alarm	Set the frequency of the unconfirmed alarm flashing cycle, in 0.1s
Blink Cycle	

2. In the "Table Property" dialog box of the "Current Alarm" component, corresponding properties can be set.

Current Alarm - Table Property Description			
Show browser control	check the browse control box on the alarm component that will display the setting ic including the total number of entries, current/total pages, and the content of the up/down pa- switch button (provided all three options are checked)		
Total entries	The total number of alarm messages for the current alarm component		
Current/total page	The current page displayed by the alarm component and the total number of pages of the current alarm information. It is valid when the [Show browser control] and [Pagination display] are checked		
Page down/up button Used for flipping up and down alarm information. It is effective when checking the browser control and [Pagination display]			
Display grid line	Set display borders, row split lines, and column split lines		
Border line type Set the border line type			
Border line width	Set border line width		
Border color	Set the color of the outer frame, and the color picker can absorb all the colors on the computer screen at this time		
Separator line type	Set Split Line type		
Separator line width	Set Split Line type		
Sprt Color	Set the split line color. The color picker can absorb all the colors on the computer screen at this time		
Title background color	Set the background color of the title bar. The color picker can absorb all the colors on the		

	computer series at this time		
	computer screen at this time		
Table background color	Set the table background color. The color picker can absorb all the colors on the computer		
	screen at this time		
Interlaced background	Set the background color for separating rows between two rows		
color			
Select color	Set the color of the selected alarm message. The color picker can absorb all the colors on the		
_	computer screen at this time		
Row gap	Set data table row spacing		
Column gap	Set data table column spacing		
Date Format	Set the format of the alarm message date		
Date Separator	Set the separator of the alarm message date		
Show 4-digit year	If this option is checked, the date of the alarm message will be displayed with 4 digits of the		
	year, otherwise it will be displayed with 2 digits.		
Time format	Set the format of alarm message time		
Content exceeds table	When the alarm content exceeds the width of the table, truncation or scrolling can be checked. If		
width	set to scrolling, you can set the step size and speed of scrolling		
Total entries	Display the total number of alarm messages for the current alarm component using variables		
Cincle nece entry num	Use a constant to set the number of entries for displaying alarm information on each page. It is		
Single page entry num	valid when selecting 【 Pagination display 】		
	Use a constant to set the number of entries for displaying alarm information on each page. It is		
Dynamic entries num	valid when selecting 【 Pagination display 】		
Export device	Export and save the alarm information displayed by the current alarm component in an external		
Export device	storage device		
Use dynamic device	Dynamically setting export devices using string variables		
Export subfolder	Set the name of the sub folder for exporting alarm information. If this item is blank, the alarm		
Export subfolder	information will be saved in the "tar" folder of the project root directory by default		
Use dynamic subfolder	Dynamically setting the name of a subfolder using string variables		
Trigger var	Set variables that trigger export		
Trigger type	Set the trigger type of the trigger variable		
Export file nome profix	Set the file name prefix for exporting alarm information, with a default combination of date and		
Export file name prefix	time for the file name		
Use dynamic file name	Using string variables to dynamically set the file name prefix		
prefix			
File name do not include	If checked, the exported file name does not include the export time		
export time			
Export file format	The file format for exporting alarm information, including CSV and PDF		
Show export button	If checked, the export button will be displayed on the component		
	If checked, the exported file format is a compressed package, and a password is required to		
File encrypt	successfully extract the file. If [File Encrypt] is not checked, the exported file format is the		
	file format set in the [Export File Format] option and can be opened directly		
Decourond			
Password	Dynamically setting the password for file encryption using string variables		

3. In the "Display Set" dialog box of the "Current Alarm" component, corresponding properties can be set.

	Current Alarm - Display Set Description				
Lock Set whether the position of the component is locked					
Fixed ratio	Set the size of the component and calculate the corresponding width or height proportionally. The ratio is the				
of width and	ratio of width to height before selecting [Fixed Ratio].				
height					
Translucent	Set display borders, row split lines, and column split lines				
	Always display: Check to indicate that the current component remains displayed				
	Condition display: Includes permission control, expression control, no communication when components are				
	hidden, and false status takes effect				
	① Authority control: Support multiple permissions control, check that the operator needs to meet the				
Display/Hid	multiple permissions of the component to display the current component.				
e	② Express control: Check to indicate that the current component can only be displayed when the state of the				
	specified bit or word variable meets the set conditions				
	③ Do not communicate when hidden: When the variables used by components are External variable, check				
	this option, and components will not communicate when they are hidden				
	④ False state work: Takes effect when in an error state				

8.5.3 Alarm History

Alarm history is used to display the alarm information content that has been established in the [Alarm Information Table] and the current state meets the triggering conditions. Alarm history can display real-time alarm information and query historical information. Please refer to <u>Chapter 14.3: Alarm Information Table</u> for the establishment of an alarm information table.

No.	Alarm content	Trigger date	Trigger time	Confirm date	Confirm time	Recovery date
1	##	23-06-05	18:24:24	23-06-05	18:24:24	23-06-05

-

1. In the "Alarm Property" dialog box of the "Alarm History" component, corresponding properties can be set.

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	Alarm History - Alarm Property Description				
Alarm type	The alarm type of the current component				
Alarm Group	For specific attribute descriptions of alarm groups, please refer to Chapter 14 【Alarm Setting】				
Include subordinate If this option is checked, the alarm component will display the lower-level alarm gro					
alarm group	currently selected alarm group. If it is not checked, only the alarm information of the currently				
	selected alarm group will be displayed. It is checked by default				
Alarm level	For specific attribute descriptions of alarm levels, please refer to Chapter 14 【Alarm Setting】				
Include higher levels	If this option is checked, the alarm component will display the superior alarm level of the currently				
	selected alarm level. If it is not checked, only the alarm information of the currently selected alarm				
	level will be displayed. It is checked by default				
Sort Order	Set the sorting method for displaying alarm information on alarm components				
Language independent	If checked, the selection box after "Display language" is invalid. The first language is used by				
	default for the component				
Show Title Bar	If checked, the alarm bar component will be displayed with a title bar. It is checked by default.				
Title font set	Click to set the title bar font related properties, this is only valid when [Show Title Bar] is				
The fold set	checked.				
List Font same as title	If checked, the font properties of the list are the same as those of the title bar.				
List font set Set the related properties of the list font					
	If checked, the data table in the alarm properties will display the "Column Font Settings" content.				
Set font by column	Double click on the corresponding "Font Settings" to set the font properties of the corresponding				
	column				

	It includes two options: [Input Direct] and [Use Text Lib] :	
	① When selecting [Input Direct], you can directly input the title name in the corresponding	
	area of the 'Title Bar Name Setting' column	
Preset text set	2) When checking [Use Text Lib], you can select the name of the text library in the	
	corresponding area of the 'Title Bar Name Setting' column. This item is only valid when [Show	
	Title Bar is checked	
Display language	Set the language of the title bar. When [Language Independent] is not checked and [Show	
	Title Bar is checked, it is valid	
Data column dynamic	Check to control whether the corresponding data column is displayed by setting a bit of the word variable to ON or OFF	
show	If checked, the "Dynamic Display" column will appear in the data table of the alarm property. By	
Dynamic set by	first checking and then selecting the bit variable, you can control whether the corresponding data	
column	column is displayed through the state of this bit variable	
	Check to set output variables for the data column, and the [Trigger Variable] and [Trigger	
Output select row data	Type] are valid. Click on any alarm information on the alarm component, and when the trigger	
to var	variable meets the set trigger type, the content of the data column will be displayed in the	
	corresponding output variable	
Mana	When selecting the row in the data table, click [Move Up] to move the selected row up. The	
Move up	[Move Up] button is valid except for selecting the first row of the data table	
Move down	When selecting a row in the data table, click [Move Down] to move the selected row down. The	
Wove down	[Move Down] button is valid except for selecting the last row of the data table	
Default sort	Restore to the original sorting of the data table	
Alarm Status Display	Set trigger color, unrecovered confirmation color, confirmation color, and recovery confirmation	
	color, and the color picker can absorb all colors on the computer screen at this time The display method of alarm information includes "one line shows different states of the same	
	alarm" and "multiple lines show different states of the same alarm".	
	① One line shows different states of the same alarm: Display the triggering, recovery, and	
	confirmation states of the same alarm on the same line;	
Alarm Display Type	② Multiple lines show different states of the same alarm: Display the triggering, recovery, and	
	confirmation states of the same alarm in different rows. When this option is selected, you can	
	check whether to display the triggering, confirmation, and recovery states. By default, all three	
	states are checked and one of them has to be checked	
Confirm Mode	Set the method for confirming alarm information, including clicking, double clicking, and long	
	pressing	
Unconfirm Alarm Blink Cycle	Set the frequency of the unconfirmed alarm flashing cycle, in 0.1s	
	dialog box of the "Alarm History" component, corresponding properties can be set.	
2. In the Alarm Query	Alarm History - Alarm Query Description	
	If unchecked, it means using the alarm browsing function to display all alarm information	
Query Function	If checked, it indicates that the current component is using the query function	
	Used to determine whether the query function is allowed. If the status is 1, the query is allowed; If	
Query states variable	the status is 0, query is prohibited and real-time browsing of all alarm information is enabled	
	When the query trigger variable meets the conditions set by the trigger method, execute the query	
Query trigger variable	function once	
Trigger type	Trigger method for querying trigger variables	
3. In the "Table Property" dialog box of the "Alarm History" component, corresponding properties can be set.		
	Alarm History - Table Property Description	

	Charle the buouse control has on the elemen component that will display the setting icon
Chow between control	Check the browse control box on the alarm component that will display the setting icon, including the total number of entries, current/total pages, and the content of the up/down page
Show browser control	switch button (provided all three options are checked)
Total entries	The total number of alarm messages for the current alarm component
Total entries	-
	The current page displayed by the alarm component and the total number of pages of the current
Current/Total page	alarm information. It is valid when the [Show browser control] and [Pagination display]
	are checked
Page down/up button	Used for flipping up and down alarm information. It is effective when checking the [Show
r age down up button	browser control] and [Pagination display]
	Clicking will pop up a filtering window for the settings. Effective after checking [show
Show Filter Button	browser control
Display grid line	Set display borders, row split lines, and column split lines
	Set the border line type
Border line type	
Border line width	Set border line width
Border color	Set the color of the outer frame, and the color picker can absorb all the colors on the computer
	screen at this time
Separator line type	Set Split Line type
Separator line width	Set Split Line type
Sprt Color	Set the split line color. The color picker can absorb all the colors on the computer screen at this
opit color	time
Title background color	Set the background color of the title bar. The color picker can absorb all the colors on the
	computer screen at this time
Table background color	Set the table background color. The color picker can absorb all the colors on the computer screen
-	at this time
Interlaced background	Set the background color for separating rows between two rows
color	
Select color	Set the color of the selected alarm message. The color picker can absorb all the colors on the
-	computer screen at this time
Row gap	Set data table row spacing
Column gap	Set data table column spacing
Date Format	Set the format of the alarm message date
Date Separator	Set the separator of the alarm message date
	After checking, the year can be displayed in 4 digits, otherwise it will be displayed in 2 digits.
Show 4-digit year	For example, for the year 2008, it displays "2008" if [Show 4-digit year] is selected; If
	[Show 4-digit year] is not selected, only 2 digits will be displayed, i.e. '08'
Time format	Set the format of alarm message time
Content exceeds table	When the alarm content exceeds the width of the table, truncation or scrolling can be checked. If
width	set to scrolling, you can set the step size and speed of scrolling
	Use word variables to display the total number of alarm messages for the current alarm
Total entries	component
Pagination display	Set alarm information to be displayed on multiple pages
i uginuron uropiuj	Use a constant to set the number of entries for displaying alarm information on each page. It is
Single page entry num	valid when selecting [Pagination display]
Export device	Export and save the alarm information displayed by the current alarm component in an external
Use dynamia desire	storage device Dynamically setting export devices using string variables
Use dynamic device	
Export subfolder	Set the name of the sub folder for exporting alarm information. If this item is blank, the alarm information will be saved in the "data" folder of the project root directory by default
Has dynamia ant f-11-	Using string variables to dynamically set sub folder names
Use dynamic subfolder	Using suring variables to dynamically set sub folder hames

Trigger var		Set variables that trigger export		
Trigger type		Set the trigger type of the trigger variable		
Export file name prefix		Set the file name prefix for exporting alarm information, with a default combination of date and time for the file name		
Use dynamic prefix	file name	Using string variables to dynamically set the file name prefix		
File name do n export time	ot include	If checked, the exported file name does not include the export time		
Export file form	nat	The file format for exporting alarm information, including CSV and PDF		
Show export bu	itton	If checked, the export button will be displayed on the component		
File encrypt		If checked, the exported file format is a compressed package, and a password is required to successfully extract the file. If [File Encryption] is not checked, the exported file format is		
		set in the [Export File Format] option. Simply open the file		
Dynamic Passw	vord	Dynamically setting the password for file encryption using string variables		
4. In the "Displ	ay Set" dial	og box of the "Alarm History" component, corresponding properties can be set.		
Alarm History	- Display S	et Description		
Lock	Set wheth	er the position of the component is locked		
Fixed ratio of	Set the size	te of the component and calculate the corresponding width or height proportionally. The ratio is		
width and height	the ratio of width to height before selecting [Fixed Ratio].			
Translucent	Set display borders, row split lines, and column split lines			
	Always d	splay: Check to indicate that the current component remains displayed		
	Condition display: Includes permission control, expression control, no communication when components			
	are hidden, and false status takes effect			
	① Authority control:Support multiple permissions control, check that the operator needs to meet the			
Diamlary/Hida	multiple permissions of the component to display the current component.			
Display/Hide	② Express control: Check to indicate that the current component can only be displayed when the state of			
	the specified bit or word variable meets the set conditions			
	③ Do not communicate when hidden: When the variables used by components are external, check this			
	option, and components will not communicate when they are hidden			
	(4) False s	tate work: Takes effect when in an error state		

8.5.4 Alarm Statistic

Alarm statistics are used to count the cumulative number of alarm messages that have been established and triggered in the [Alarm Information Table]. Please refer to <u>Chapter 14.3: Alarm Information Table</u> for the establishment of an [alarm information table].

No.	Alarm content	Alarm cumulative time	Alarm cumulative number
1	##	1	1

1. In the "Alarm Property" dialog box of the "Alarm Statistic" component, corresponding properties can be set.

Alarm Statistic - Alarm Property Description			
Alarm type	The alarm type of the current component		
Alarm Group	For specific attribute descriptions of alarm groups, please refer to Chapter 14 [Alarm Setting]		
Include subordinate	If this option is checked, the alarm component will display the lower-level alarm groups of the		

alarm group	currently selected alarm group. If it is not checked, only the alarm information of the currently selected alarm group will be displayed. It is checked by default			
Alarm level	For specific attribute descriptions of alarm levels, please refer to Chapter 14 【Alarm Setting】			
Include higher levels	If this option is checked, the alarm component will display the superior alarm level of the currently selected alarm level. If it is not checked, only the alarm information of the currently selected alarm level will be displayed. It is checked by default			
Sort Order	Set the sorting method for displaying alarm information on alarm components			
Language independent	If checked, the selection box after "Display language" is invalid. The first language is used by			
	default for the component			
Show Title Bar	If checked, the alarm bar component will be displayed with a title bar. It is checked by default.			
Title font set	Click to set the title bar font related properties, this is only valid when [Show Title Bar] is checked.			
List Font same as title	same as title If checked, the font properties of the list are the same as those of the title bar.			
List font set	Set the related properties of the list font			
Set font by column	If checked, the data table in the alarm properties will display the "Column Font Settings" content. Double click on the corresponding "Font Settings" to set the font properties of the corresponding column			
	It includes two options: [Input Direct] and [Use Text Lib] :			
	① When selecting 【Input Direct】, you can directly input the title name in the corresponding area of the 'Title Bar Name Setting' column			
Preset text set	② When checking 【Use Text Lib】, you can select the name of the text library in the			
	corresponding area of the 'Title Bar Name Setting' column. This item is only valid when [Show			
	Title Bar] is checked			
	Set the language of the title bar. When [Language Independent] is not checked and [Show			
Display language	Title Bar] is checked, it is valid			
Data column dynamic	Check to control whether the corresponding data column is displayed by setting a bit of the word			
show	variable to ON or OFF			
Dynamic set by column	If checked, the "Dynamic Display" column will appear in the data table of the alarm property. By first checking and then selecting the bit variable, you can control whether the corresponding data column is displayed through the state of this bit variable			
	Check to set output variables for the data column, and the [Trigger Variable] and [Trigger			
Output select row data to var Type] are valid. Click on any alarm information on the alarm component, and when variable meets the set trigger type, the content of the data column will be display corresponding output variable				
	When selecting the row in the data table, click [Move Up] to move the selected row up. The			
Move up	[Move Up] button is valid except for selecting the first row of the data table			
	When selecting a row in the data table, click [Move Down] to move the selected row down.			
Move down	The [Move Down] button is valid except for selecting the last row of the data table			
Default sort Restore to the original sorting of the data table				
Alarm Display type Fixed to display the same alarm in different states on a single line, cannot be modified				
2. In the "Table Property	y" dialog box of the "Alarm Statistics" component, corresponding properties can be set.			
· ·	Alarm Statistic - Table Property Description			
Show browser control	Check the browse control box on the alarm component that will display the setting icon, including the total number of entries, current/total pages, and the content of the up/down page switch button (provided all three options are checked)			
Total entries	The total number of alarm messages for the current alarm component			
Current/Total page The current page displayed by the alarm component and the total number				
10	current alarm information. It is valid when the [Show browser control] and [Pagination			

	display] are checked			
	Used for flipping up and down alarm information. It is effective when checking the Show			
Page down/up button				
	browser control and [Pagination display]			
Show Filter Button	Clicking will pop up a filtering window for the settings. Effective after checking [show			
	browser control			
Display grid line	Set display borders, row split lines, and column split lines			
Border line type	Set the border line type			
Border line width	Set border line width			
Border color	Set the color of the outer frame, and the color picker can absorb all the colors on the computer			
border color	screen at this time			
Separator line type	Set Split Line type			
Separator line width	Set Split Line type			
Sprt Color	Set the split line color. The color picker can absorb all the colors on the computer screen at this			
Spit Color	time			
Title background color	Set the background color of the title bar. The color picker can absorb all the colors on the			
	computer screen at this time			
Table background color	Set the table background color. The color picker can absorb all the colors on the computer			
-	screen at this time			
Interlaced background	Set the background color for separating rows between two rows			
color	Set the color of the selected alarm message. The color picker can absorb all the colors on the			
Select color				
Row gap	computer screen at this time Set data table row spacing			
Column gap	Set data table column spacing			
Date Format	Set the format of the alarm message date			
	Set the rolling of the alarm message date			
Date Separator				
	After checking, the year can be displayed in 4 digits, otherwise it will be displayed in 2 digits.			
Show 4-digit year	For example, for the year 2008, it displays "2008" if [Show 4-digit year] is selected; If			
	[Show 4-digit year] is not selected, only 2 digits will be displayed, i.e. '08'			
Time format	Set the format of alarm message time			
Content exceeds table	When the alarm content exceeds the width of the table, truncation or scrolling can be checked.			
width	If set to scrolling, you can set the step size and speed of scrolling			
Total entries	Use word variables to display the total number of alarm messages for the current alarm			
D 1 1 1	component			
Pagination display	Set alarm information to be displayed on multiple pages			
Single page entry num	Use a constant to set the number of entries per page that display alarm information. Valid when			
	checked for [Pagination Display]			
Dynamic entry num	Use the word variable to set the number of entries for displaying alarm information on each			
29	page, which is valid when [Display by Page] is checked			
Page num	Use the word variable to set the total number of pages for the current alarm message. Valid			
	when checked for [Pagination Display]			
Current Page	Use word variables to control the current page displayed by the alarm component. Valid when			
	checked for [Pagination Display]			
Export device	Export and save the alarm information displayed by the current alarm component in an external			
Export device	storage device			
Use dynamic device	Dynamically setting export devices using string variables			
Export subfolder	Set the name of the sub folder for exporting alarm information. If this item is blank, the alarm			
Export subiolder	information will be saved in the "tar" folder of the project root directory by default			
Use dynamic subfolder	Using string variables to dynamically set sub folder names			

Trigger var		Set variables that trigger export		
Trigger type		Set the trigger type of the trigger variable		
Export file name	e prefix	Set the file name prefix for exporting alarm information, with a default combination of date and time for the file name		
Use dynamic file name prefix		Using string variables to dynamically set the file name prefix		
File name do not include export time		If checked, the exported file name does not include the export time		
Export file form	at	The file format for exporting alarm information, including CSV and PDF		
Show export bu	tton	If checked, the export button will be displayed on the component		
File encrypt		If checked, the exported file format is a compressed package, and a password is required to		
		successfully extract the file. If [File Encryption] is not checked, the exported file format is set in the [Export File Format] option. Simply open the file		
Dynamic Passw	ord	Dynamically setting the password for file encryption using string variables		
3. In the "Displa	y Set" dialo	by box of the "Alarm Statistic" component, corresponding properties can be set.		
		Alarm Statistic - Display Set Description		
Lock	Set wheth	er the position of the component is locked		
Fixed ratio of	Set the siz	te of the component and calculate the corresponding width or height proportionally. The ratio is		
width and height	the ratio o	f width to height before selecting [Fixed Ratio].		
Translucent	Set display borders, row split lines, and column split lines			
	Always display: Check to indicate that the current component remains displayed			
	Condition display: Includes permission control, expression control, no communication when components			
	are hidden, and false status takes effect			
	① Authority control: Support multiple permissions control, check that the operator needs to meet the			
Display/Hide	multiple permissions of the component to display the current component.			
Display/filde	② Express control: Check to indicate that the current component can only be displayed when the state of			
	the specified bit or word variable meets the set conditions			
	③ Do not communicate when hidden: When the variables used by components are External variable, check			
	this option	h, and components will not communicate when they are hidden		
	(4) False state work: Takes effect when in an error state			

8.6 Chart

8.6.1 Trend

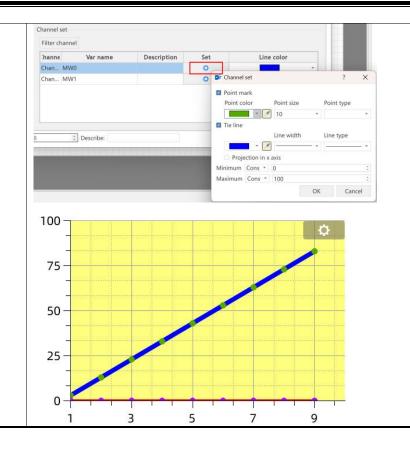
Display the background data of data sampling in the form of curve Run chart, and refer to "Data Sampling" for background settings of data sampling

[Trend] interface

	Data source 1:16	6位 -					
Draw Set							
Scale Set	▼ Data source info	io -					
Display Set	Trig	gger type	Clear type	Record data		Max days	
		Bit	Not use	Days		7	
	Dynamic show						
	Data column d Use cursor						
	Cursor color	Show/hide cursor					
							+
							+
	Channel set		Var name	Description	Set	Line color	
	Channel set Filter channel Channel	 tiaojian 	Var name 16无	Description 16无	Set		
	Channel set Filter channel 近道1 マ b	 tiaojian Dyn show 					
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8.6.1.1 Channel Properties

	Irend - Channel Properties Description			
Data sources	Select sampling entries added in data sampling			
Dynamic show by column	Use bitwise variables to individually control column display, display when 0, hide when 1			
Data column dynamic show	Using the bit control of a word variable to display the column, the first column is displayed when bit0 is 0, hidden when bit1 is 1, bit1 controls the second column, and so on			
	Cursor color: set the color of the cursor and display area			
Use cursor	Show/hide cursor: bit variable control, show when 1, hide when 0			
	Cursor data area: After checking, you can set the sampling point data of the cursor			
Filter Channel	By default, select all and manually filter/cancel the corresponding channel display			
Curve Settings	Can set the drawing point/curve attributes of the channel			

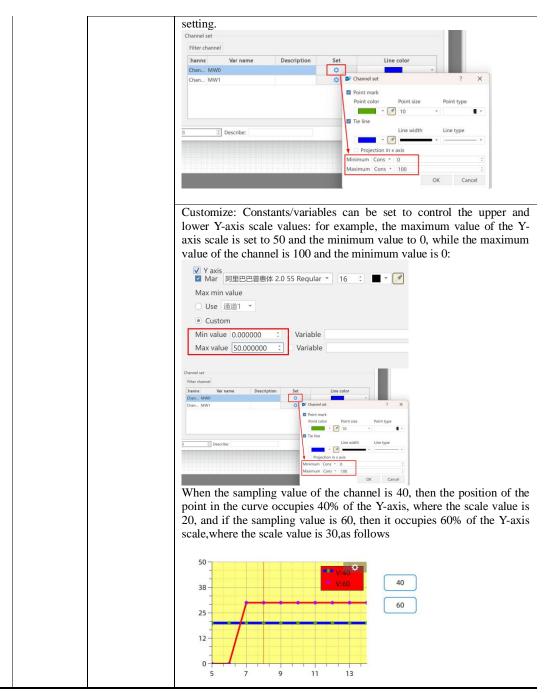


8.6.1.2 Draw Settings

Trend - Draw Settings Description				
Display screenmode perScreen show point number: Set the number of sampling points that can be displayed current page of the curve.Screen show time range: control the curve data in the time period displayed on the page according to the constant/variable (minutes).				
Background color	Background color settings for curves			
Use scale	The variable is an integer that controls the zoom-in/zoom-out ratio of the curve.			
Q (1 2 Cashe Catting				

8.6.1.3 Scale Settings

	Trend - Scale Settings Description					
	X-axis	scale length: sett				
Scale settings	Y-axis	scale length: sett	Main scale number:Setting of the number of main scales of the Y-axis of the curve; main scale length: setting of the length of the main scale line Second scale number: check the box to set the number of Y-axis subscales and the length of the subscales			
	Axis scale color	Setting the color	of X/Y axis scale lines			
	Show gridlines	Check the box to	set the grid color of the X/Y axis main scale inside the curve.			
		Marker: Check the	he box to display the X-axis scale label, set the font, size and color.			
	X-axis S	Scale display method	Using point scale values: The scale displayed on the X-axis is the serial number of the sampling point "1, 2, 3". Use the time scale value: the scale displayed on the X-axis is the			
Label		memou	corresponding date of the sampling point, time			
settings		Marker: Check integer/decimal of	the box to display the Y-axis scale label, set font, size, color, ligits.			
	1-0.15	Max min value	Use channel: select the corresponding channel to control the upper and lower Y-axis scale value, the maximum and minimum value of the channel can be set as constant/variable control in the channel property			



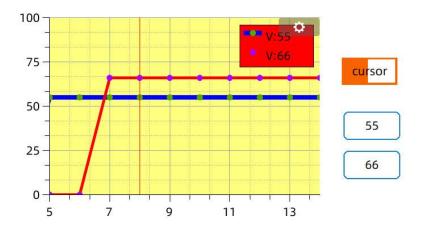
8.6.1.4 Display Settings

Trend - Display Settings Description			
location	Sets whether the position of the component is locked or not		
Fixed Ratio	Set the size of the component to calculate the corresponding width or height proportionally. Proportion is the ratio of width and height before [Fixed Ratio] is ticked.		
Translucent	Check Enable to set the component's semi-transparency.		
Display/Hide	 Always display: check to indicate that the current component is always displayed Conditional display: Includes permission control, expression control, no communication when element is hidden and False status in effect. (1)Privilege control: Support multiple permissions control, check that the operator needs to meet the multiple permissions of the component to display the current component. (2)Expression control: check to indicate that the current component can be displayed only when the state of the specified bit variable or word variable satisfies the set condition (3)Do not communicate when hidden: when the variable used by the component is an external variable, check this option and the component will not communicate when it is hidden. 		

(4)False state work: Effective in error status

8.6.1.5 Operating effect

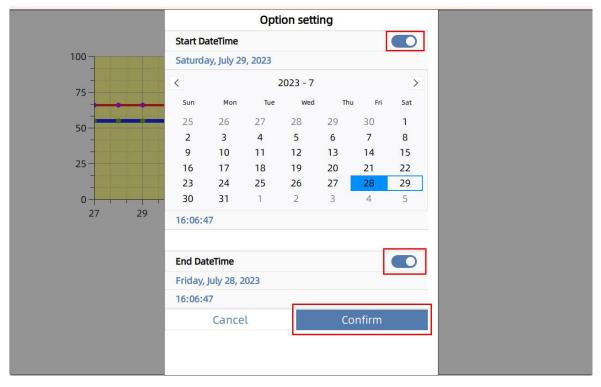
Offline simulation effect:



8.6.1.6 Trend Chart Search

1. View the recent history curve: you can directly drag the curve to the left to view the history curve, double-click the control can be restored to the real-time curve.

2. View the curve in a certain period of time: open the gear at the top right of the control, turn on the start/end time, click on the confirmation after setting to display the curve in the period of time, double-click on the control, or manually close the start/end date buttons, can be restored to the real-time curve.



8.6.2 XY CHart

The sampled data is displayed in the form of curves

[XY chart element] Interface

asic setting		
raw Set	Basic Setting Channel Setting	
cale Set	Sample Condition	
isplay Set	Cycle * Fixed Cycle *	
	Cycle 1 Variable	+
	🛃 Clear Variable 满腕	+

8.6.2.1 Basic Set

		Basic set description
	Cycle sample: fixed Cycle	The unit of the parameter can be s or ms, indicating that the interval is sampled once. Period range 1-4294967295; Select variables to select 8-64 unsigned integer variables
	Cycle sample: fixed Time	 Limit the maximum number of samples only within a given time and sampling period The start time must be smaller than the end time. Both the start time and the end time are time-type data The unit of sampling period is S or MS, and the minimum unit of sampling period is 100ms; The period can also be set as a variable, optionally 8-64 unsigned integer variable The maximum number of samples is (end time - start time)*10,(time is changed to milliseconds).
	Bit state change sample	Optional bit variables (word taking bits is also supported), support OFF<->ON, OFF->ON, ON->OFF, OFF->ON automatic reset, ON- >OFF automatic reset five ways, meet the trigger sampling once
sample	Word-value change sample: Collect when changes occur	Specifies that a data collection is performed whenever the word variable changes
	Word-value change sampling:comply with variable range acquisition	If the value of the specified word variable changes between two consecutive times within the specified range, a data collection is performed; Word variable, optional 8-64 integer variable; Range: 0-Select the absolute value of the type range; When "Variables" is checked, 8-64 unsigned integer variables can be selected; If it's 0, it's the same as sampling when something changes;
	Expression sample	Bit: ON, OFF, logical not Word: equal, less than, greater than, less than or equal to, greater than or equal to, not equal to (variable or constant) Note: Multiple conditions can be modified by double clicking the action column AND OR by double clicking the bracket column ()

	I									
				nel Setting						
			ession							
		-								
			W3221010NI\&8	((MW210==1) (MW21)	01))					
		(14)	W322[0]==014)888	((www.ro==)))(www.ro	01))					
			ID Opera	tion		Express			Pa re nthe	ses
			1 2 AN	0		MW322[0]==ON MW210==1				
			3 OR			MW210==1)	
clean	Optional bit va automatically res		pport w	ord taking	g bits,	ON trig	gers	clearing,	after	clearing
Dynamical display by channel	Use a bit variabl		tely cont	rol column	displa	y, display v	when (0, hide w	hen 1	
Channel Dynamical	Using the bit co	ntrol colun	nn of the	word varia	able, th	ne first col	umn i	s display	ed wh	en bit0 is
display	0, hidden when i	,				,				
	1. Set different c	,	21							
	2. After the conn		-	d, set the di	ifferen	t color, wi	dth an	d type of	the lir	ie
	3. Set the project4. Set the maxim			value of a al	honnal					
	4. Set the maxim				namei					
	Dr [XYC_0003]									×
	月变: Basic setting									
	Draw Set	Basic Setting	Channel Setting							
	Scale Set	+ 🔳					X Axis Varial		Y Axis Variabl	-
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		4		• 2	10			\sim	•	Y
		Dynamic di			Line width		Line type			
		Channel dy		• 2					*	
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				Constant * 0	÷	Maximum 0	Constant *	100	\$	
			Y Axis Minimum	Constant 🔻 0	:	Maximum	Constant *	100	:	
	Help ID: 3	* *	Descri					OK Cance	d Ca	ncel
	1.X axis, Y axi	s separatel	y config	ure variabl	es, su	port 8-64	, sing	le/double	e float	ing point
	number types, c									
	structure membe	r variables				-			-	-
variable configure	2.X/Y variable c									
variable configure	configurable ch									
	automatically ge									
	1 1 4 4 5 5 1 5 5 5 6 1 5 5									
	but an insert is displays a red ex			e row), an	d the	variable of	f the	other axi	s is ei	npty and

8.6.2.2 Draw Set

	Draw Set property description		
Screen show Point number	Points per screen: Set the number of sampling points that can be displayed on the current page of the curve		
Background color	Curve background color Settings		
.6.2.3 Scale Set			

		Scale setdescription
Scale set	X/Y axis	Number of main scales: the number of main scales on the X/Y axis of the curve is set; Main scale length: Set the length of the main scale line

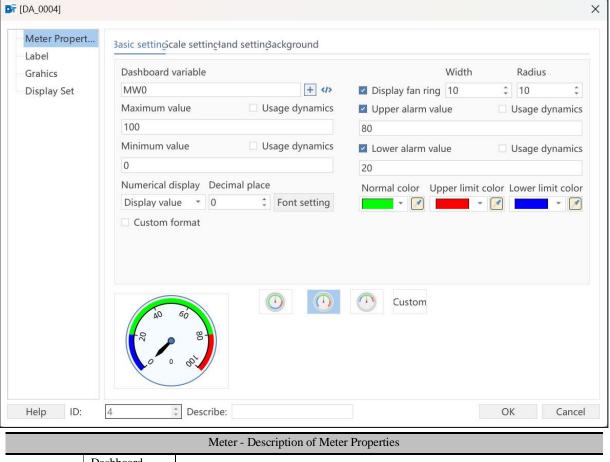
		Number of sub-s	scales: After checking, you can set the number and length of sub-scales on
		the X/Y axis of t	he curve
	Axis Scale Color	Set the color of t	he X/Y axis
	scale line	1 5 6	checked, do not display X/Y axis scale; After checking, you can set the X/Y axis main scale in the curve
			ed, XX/ Y-axis label will not be displayed; Check the back curve to label, set font, size, color, integer/decimal places
			Use channel: Select the corresponding channel to control the upper and lower scale values of the X/Y axis, and the maximum and minimum values of the channel can be set to constant/variable control in the channel property Settings
Label set	X/Y axis	Max min value	Custom: Constant/variable can be set to control the upper and lower limits of the X/Y axis scale values: For example, the maximum value of the Y axis scale line is set to 50 and the minimum value is 0, while the maximum value of the channel is 100 and the minimum value is 0: When the sampling value of the channel is 40, then the position of the point in the curve occupies 40% of the Y-axis, that is, the scale value of 20; if the sampling value is 60, then it occupies 60% of the Y-axis scale line, that is, the scale value of 30

8.6.2.4 Display Set

Meter-Display Setting Instructions				
Lock	Sets whether the position of the component is locked or not			
Fixed ratio	Set the size of the component to calculate the corresponding width or height proportionally. Proportion is			
Fixed Tatio	the ratio of width and height before [Fixed Aspect Ratio] is ticked			
Translucent	Check Enable to set the component's semi-transparency.			
	Always display: check to indicate that the current component is always displayed			
	Conditional display: Includes permission control, expression control, no communication when element is			
	hidden and False status in effect.			
	()Privilege control: Support multiple permissions control, check that the operator needs to meet the			
	multiple permissions of the component to display the current component.			
Display/Hide	②Expression control: check to indicate that the current component can be displayed only when the state			
	of the specified bit variable or word variable satisfies the set condition			
	③Do not communicate when hidden: when the variable used by the component is an external variable,			
	check this option and the component will not communicate when it is hidden.			
	④False state work: Effective in error status			

8.6.3 Meter

8.6.3.1 Meter Properties



	Dashboard variable	Supports 8-64 bit numeric variables, single/double precision floating point numbers
	Numerical	Display value: displays the current value of the dashboard variable; you can set the number of decimal places and tick the custom format, (the number of decimal places ranges from 0 to 8, default 0) Show percentage: calculates the percentage of the current value between the
	display	minimum and maximum values, the pointer points to the corresponding angle of the sector
		Font setting: you can set the font for numerical display
		Default input static value, the range of the static value should be within the range of
Basic		the dashboard variable (judging by the variable type), the maximum value is greater
settings		than the minimum value
U	Minimum and	Usage dynamics: can be ticked to use dynamic variables (support 8-64 bit numerical
	Maximum	variables, single/double precision floating point numbers), the scale changes with the
	value	dynamic variable value in real time; dynamic minimum value is greater than the
		maximum value, the scale label still shows the last time, does not change; if the
		variable value is entered more than the maximum value, the meter needle points to
		the maximum value, if you tick the alarm for exceeding the limit, then it will show
		the corresponding alarm colors (the same with the minimum value)
	Display fan	Default tick display, can set fan ring width and radius
	ring	Width: default 10, range 1-10
		Radius: default 10, range 1-10
	Upper/lower	Upper and lower alarm limits can be set by ticking the box, default is not ticked.

1

	limit alarm	When both are static values, lower limit value < upper limit value < maximum value
	value	minimum value < lower limit value < upper limit value
		Can be set to dynamic variables (supports 8-64 bit numeric variables, single/double
		precision floating point numbers)
		Fan ring normal colour can be set, when the corresponding upper/lower limit alarm i
		ticked, the corresponding alarm colour can be set, otherwise hidden
		Default tick box to show
		Master scale: default 6, range 2-100
		Secondary scale: default 0, range 0-100
		length:
	G 1	i. Simultaneous control of the length of the primary and secondary scales
	Scale	ii. 60 per cent of the length of the secondary scale to the length of the primary scale.
		iii. Default 6, range 1-10
Scale setting		Scale color: the colour of the scale can be set
		Outer frame: ticked by default, when ticked, a layer of frame is applied to the outside
		of the scale.
		Default tick box to show
	Scale label	Label decimal place: Displays the scale label value, default 0, range 0-8
	Source Incore	Radius: default 10, range 1-10
		Font setting: you can set the font of the scale label
		Pointer style, pointer colour and frame colour can be set (when a graphic is selecte
		for the pointer style, the pointer colour becomes a graphic selection button, and
	Pointer	graphic from the graphic library can be selected as the pointer).
		Pointer length: default 70%, range 1-100
Hand Setting		Pointer width: default 10%, range 1-10
		Default check Show Axis, you can set Axis Style, Axis Colour, Frame Colour (when
		the Axis Style selects a graphic, the colour becomes a graphic selection button, yo
	Axis	can select a graphic in the graphic library to be the Axis)
		Radius: default 6, range 1-10
	Dealannaid	
	Background	Background colour can be set;
	color	Background colour can be set to transparent
	Frame color	Frame colour can be set;
		Frame colour can be set to transparent
Paakaround		-
Background		Ticked by default;
Background	Whole circle	Ticked by default; When unchecked, the background colour range is the current angle of the sector
Background	Whole circle	Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle.
Background	Whole circle Smooth	Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked
Background		Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, i
Background	Smooth	Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, is moves in a sliding motion.
Background	Smooth	Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, is moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated is
Background	Smooth	 Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, it moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated if real time, and when the title or graphic is updated, it is refreshed when it returns to the sector.
Background	Smooth	 Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, is moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated i real time, and when the title or graphic is updated, it is refreshed when it returns t the dial properties (parameters: maximum and minimum values, upper and lower)
Background	Smooth animation	Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, it moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated it real time, and when the title or graphic is updated, it is refreshed when it returns to the dial properties (parameters: maximum and minimum values, upper and lower alarm limits, scale related, needle related, title related, graphic related, angle related
Background	Smooth animation	Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, it moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated it real time, and when the title or graphic is updated, it is refreshed when it returns t the dial properties (parameters: maximum and minimum values, upper and lowe alarm limits, scale related, needle related, title related, graphic related, angle related background related); if a dynamic variable is ticked, then the preview effect
	Smooth animation	 Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, it moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated i real time, and when the title or graphic is updated, it is refreshed when it returns t the dial properties (parameters: maximum and minimum values, upper and lower alarm limits, scale related, needle related, title related, graphic related, angle related background related); if a dynamic variable is ticked, then the preview effect maintains the effect of the last static value)
	Smooth animation	Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, it moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated in real time, and when the title or graphic is updated, it is refreshed when it returns to the dial properties (parameters: maximum and minimum values, upper and lowe alarm limits, scale related, needle related, title related, graphic related, angle related background related); if a dynamic variable is ticked, then the preview effect
	Smooth animation	 Ticked by default; When unchecked, the background colour range is the current angle of the sector when checked, the background colour range is the whole circle. Default unchecked When unchecked, the dial pointer moves in a jogging motion; when checked, it moves in a sliding motion. When the parameters in the dashboard are modified, the preview effect is updated in real time, and when the title or graphic is updated, it is refreshed when it returns to the dial properties (parameters: maximum and minimum values, upper and lowe alarm limits, scale related, needle related, title related, graphic related, angle related background related); if a dynamic variable is ticked, then the preview effect of the last static value)

	Custom: Start angle and rotation angle can be modified
	i. Starting angle range 0-359, rotation angle range 1-360
	ii. When the rotation angle is 360, the display will be rounded.
	iii. Start angle default 225, rotation angle default 270
	iv. Clockwise or anti-clockwise selectable

8.6.3.2 Label

Dashboard labeling is consistent with component labeling settings, see 8.1.6 for details

8.6.3.3 Graphics

Meter-Graph Setup Instructions			
Enable graphics: check Enable graphic, when checked, it will be displayed under "Background", at the bottom, when using			
other graphic, the fill range will be square.			
Import Creations Import the required graphics from the system likesary			

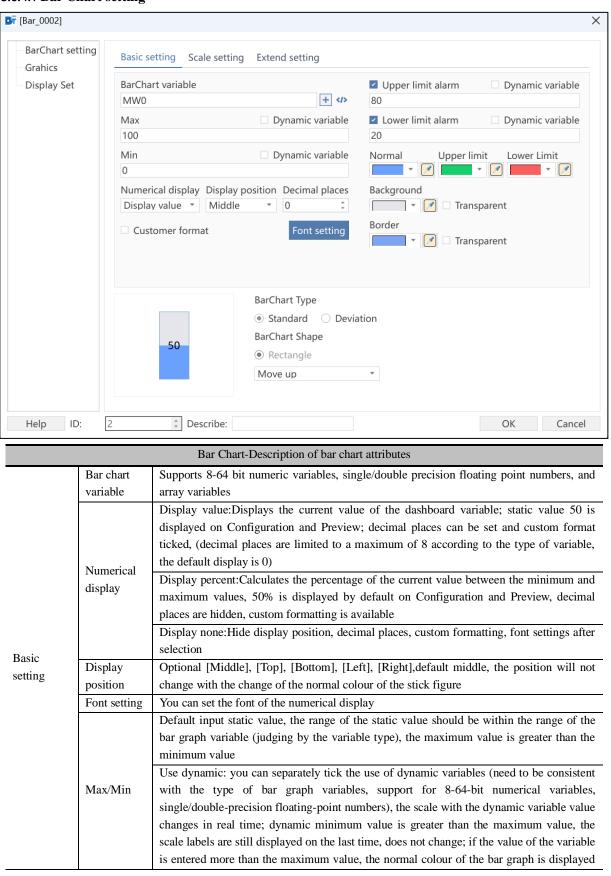
Import Graphics	Import the required graphics from the system library
Add Graphics	Adding graphics beyond the system gallery
Original size	Use the original dimensions of the graphic
Batch Import Picture	Batch import external images, supported image formats are .jpg .jpeg .png .bmp
Delete	Delete the currently selected graphic
Import Image	Import a single external image, support for image formats are .jpg .jpeg .png .bmp
Shadow Effect	Possibility to add shadow effects to pictures
Modify Fill	Possibility to modify the filling effect of the picture

8.6.3.4 Display Set

	Meter-Display Setting Instructions				
Lock	Sets whether the position of the component is locked or not				
Fixed ratio Set the size of the component, the default check box [Fixed Ratio], the width and height are equal.					
Translucent	Check Enable to set the component's semi-transparency.				
	Always display: check to indicate that the current component is always displayed				
	Conditional display: Includes permission control, expression control, no communication when element is				
	hidden and False status in effect.				
	()Privilege control: Support multiple permissions control, check that the operator needs to meet the				
	multiple permissions of the component to display the current component.				
Display/Hide	②Expression control: check to indicate that the current component can be displayed only when the state				
	of the specified bit variable or word variable satisfies the set condition				
	③Do not communicate when hidden: when the variable used by the component is an external variable,				
	check this option and the component will not communicate when it is hidden.				
	④False state work: Effective in error status				

8.6.4 Bar Chart

8.6.4.1 Bar Chart setting



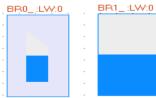
	•	1
		to the maximum value, and if you tick the alarm for the overrun, then the corresponding
		display of the alarm colour (the same with the minimum value)
		Upper and lower alarm limits can be set by ticking the box, default unchecked
		When both values are static, lower limit value < upper limit value < maximum value,
	Upper/lowe	minimum value < lower limit value < upper limit value
	r limit	an be set as dynamic variables (must be consistent with the bar graph variable type,
	alarm	support 8-64 bit numeric variables, single/double precision floating point numbers)
		The corresponding alarm colour can be set only after the corresponding upper/lower alarm
		is checked, otherwise it is hidden
	Normal	Set the normal state colour of the bar graph
	Background	Set the background colour of the bar graph, transparent can be ticked
	Border	Set bar graph frame colour, transparent can be ticked
		Default unchecked
		Number of primary scales: default 3, range 2-100, number of secondary scales: default 5, range 0-100
		Length:
		i.Control the length of main scale and sub-scale at the same time.
		ii. The length of the secondary scale is 60% of the length of the main scale.
	Scale	iii.Default 20 (length of main scale), range 1-999
		Scale colour: you can set the colour of the scale
Scale		Display position: when the direction of bar graph drawing is [move up], [move down], the
setting		display position can be selected as left or right; when the direction of bar graph drawing is
		[move left], [move right], the display position can be selected as top or bottom
		Default unchecked, only after ticking the scale can tick to show the scale label
		Label Decimal Digits: display the value of the scale label, the number of digits is limited
	Scale label	according to the variable type of the bar graph, the maximum number of digits is not more
		than 8 by default 0
		Font Settings: set the font of the scale labels
		Font colour: you can set the colour of the scale label, the same as the colour in the font
		settings
		Default unchecked
	smooth	When unchecked, the normal colour of the bar graph will move in a bouncing motion;
	animation	when checked, it will move in a sliding motion
		Default unchecked
		Target value: set the target value, the range is limited according to the type of bar graph
		variable
		Target value colour: ticked by default when target value is selected; indicates the colour of
Extend		the filled area of the bar chart when the value of the bar chart variable is within the range
setting		of the target value; at least one of them should be ticked together with the style, and both
	target value	can be ticked at the same time
		Allowable error: set the range of the target value, the range of error value is limited
		according to the type of bar chart variable
		Style: default check box when target value is selected, you can set the style and colour,
		used to indicate the target value range; at least one of the target value and the target value
		colour can be checked at the same time
		When the parameters in the bar graph are modified (parameters: basic settings, scale
	Preview	settings, extended settings), the preview effect will be updated in real time, if the dynamic
provious	effect	
previews	Dorf	variables are ticked, the preview effect will keep the effect of the last static value
	BarChart	Standard: shows the relationship between the current value of the bar graph variable and
	type	the set range

	Deviation: display the offset between the current value of the bar graph variable and the original data, check the deviation type to display the input box of the original data, and the range of the original data is restricted according to the maximum and minimum values, the display effect is as follows: 100 - 0 Offset Of Original Data:40 50 - 40 0 0 D100=20 D100=70
BarChart shape	Drawing direction can be selected [Move Up], [Move Down], [Move Left], [Move Right], default [Move Up]

8.6.4.2 graphics

Bar Chart-Graphic Description

Enable Graphics: unchecked by default, check Enable Graphics, the graphic is displayed in the upper layer of the bar graph (excluding the outer frame), when the graphic is similar to the boiler this kind of middle skeleton graphic, the sliding change of the colour of the bar graph is only displayed in the skeleton, the effect is as follows:



Import Graphics	Import required graphics from the system library
Add Graphics	Adding drawings outside of the system library
Original size	Use the original size of the graphic
Batch Import	Datah import of automal imagazin ing ingging hun format
Picture	Batch import of external images in .jpg .jpeg .png .bmp format
Delete	Delete the currently selected graphic
Import Picture	Import a single external image, supported image formats are .jpg .jpeg .png .bmp
Shadow Effects	Add a shadow effect to a picture
Modify Fill	Modify the fill effect of a picture

8.6.4.3 Display Set

	Meter-Display Setting Instructions
Lock	Sets whether the position of the component is locked or not
Fixed ratio	Set the size of the component to calculate the corresponding width or height proportionally. Proportion is
	the ratio of width and height before [Fixed Aspect Ratio] is ticked
Translucent	Check Enable to set the component's semi-transparency.
	Always display: check to indicate that the current component is always displayed
	Conditional display: Includes permission control, expression control, no communication when element is
	hidden and False status in effect.
	()Privilege control: Support multiple permissions control, check that the operator needs to meet the
	multiple permissions of the component to display the current component.
Display/Hide	②Expression control: check to indicate that the current component can be displayed only when the state
	of the specified bit variable or word variable satisfies the set condition
	③Do not communicate when hidden: when the variable used by the component is an external variable,
	check this option and the component will not communicate when it is hidden.
	④False state work: Effective in error status

8.6.5 Pipe

8.6.5.1 Pipe setting

Dipe[Pipe_0001]		×
Pipe setting Display Set	Pipe Setting Block Set caliber(px) pipe co 26 1 pipe wall(px) pipe wa 2 2 1	Transparent
Help ID:	1 🕂 Describe	e: OK Cancel
		Pipeline - Pipeline Property Description
	pipe caliber	Default 26, pipe caliber must be greater than or equal to [block width + (pipe wall * 2)].
Pipe Setting	pipe colour	Pipe colours can be set, and colours can be modified using the colour picker. The Transparent tick box for pipe colour is greyed out by default, when the wall colour is ticked Transparent, it is allowed to set the tick box for Pipe Colour Transparent.
Setting	Pipe wall	Default 2, pipe wall must be less than or equal to [(pipe caliber- flow block width)/2].
	Pipe wall colour	Possibility to set the colour of the tube wall, colour can be modified using the colour picker Transparency can be ticked
	length	Default 32, range 1-255
	width	Default 16, block width must be less than or equal to [pipe caliber - (pipe wall * 2)].
	spacing	Default 8, range 1-255
	style	Available in 3 styles
	,	Flow block colours can be set and colours can be modified using the colour picker.
	color	Transparency can be ticked
Block		Default unchecked, ticked to allow the setting of 5 dynamic colours
Setting	dynamic Colour	When the value of a dynamic variable is equal to the index value, the flow block fills
		with the colour corresponding to the index of the table. Default unchecked, defines the default flow direction based on the direction of drawing
		Static reverse and dynamic reverse selectable
	relverse flow	When [Static Reverse] is selected the flow block flows in the opposite direction.
		Select [Dynamic Reverse], the variable can be associated with Bit, Boolean, Word Fetch, Byte Fetch, Double Word Fetch, Quad Word Fetch, and reverse flow when set to ON.
Speed	flow velocity	This drop-down box is for static flow rate, divided into 1-10 levels, the larger the

Setting		level, the faster the flow rate							
		It is unchecked by default, and when unchecked, flows according to the static flow rate or the dynamic flow rate by default; Check to select bits and expressions							
	dynamic stop								
	dynamic stop flow effect	When bit type: can be associated with Bit, Boolean, Word Fetch, Byte Fetch, Double Word Fetch, Quad Word Fetch.							
		When ticked, the flow block will flow at static or dynamic flow rate when OFF or the expression is false, and will stop flowing when ON or true.							
	dynamic flow velocity	Flow rate level= current flow rate /							
preview	Preview effect	When the parameters in the pipeline are modified (parameters: pipeline, flow block, flow rate), the preview is updated in real time.							
		Show only a section of the horizon	tal pipeline to preview the effect of the parameters						
8.6.5.2 Expla	nation of pipeline	drawing in the configuration w	indow						
		line-Configuration Window Pipeline							
Individual pipeline drawing	After selecting the pipeline, the mouse becomes cross-shaped, click on the canvas to generate nodes, nodes connected into a line, the right mouse button to click on the first to open the properties window, complete the attribute settings click on the OK button to close the window, the line becomes the default pipeline-like (to create a component success) The angle of pipe corners should not be less than 90°.								
	Drag nodes to c	change pipe direction and length							
Multi-stage pipeline mapping	the mouse and "Add Vector G displayed:	e to the node (at the intersection of d the centre line) and right-click: raphic" and "Add Component" are	 Add pipes: The mouse becomes the drawing state, automatically defines the cross node as the first node of the new pipeline, and the node where the mouse clicks for the first time is the second node of the new node. Added piping elements: default property parameters remain the same as those of the piping being added "New pipeline" moves with cross nodes Add other components: Place the component with the node as the coordinate centre Elements can be moved in the central axis of the pipeline where the nodes intersect 						
			ctor Graphic" and "Add Component" are displayed: t the vertical intersection of the mouse and the axis.						
	Each pipe is a		s of the pipes form cross nodes when they are close						
Other	There is also a vertically centradsorption)	an adsorption relationship between ed when the element is close to the p	the pipe and the element, which is automatically pipe node or central axis (allowing movement out of						
	Only the pictur	e, switch/light element can form an a							
			e element and the pipe, the element loses its locking						
	runction, the lo	function, the locking is ineffective and the grey is placed.							

8.6.5.3 Display Set

	Piping-Display Setup Instructions
Translucent	Check Enable to set the component's semi-transparency.
	Always display: check to indicate that the current component is always displayed
	Conditional display: Includes permission control, expression control, no communication when element is
	hidden and False status in effect.
	()Privilege control: checking indicates that the operator needs to have the set privileges to display the
Display/Hide	current component.
	②Expression control: check to indicate that the current component can be displayed only when the state
	of the specified bit variable or word variable satisfies the set condition
	③Do not communicate when hidden: when the variable used by the component is an external variable,
	check this option and the component will not communicate when it is hidden.

④False state work: Effective in error status

8.7 Information

8.7.1 Communication

The "communication" here refers to editing the communication prompt information window, as shown in the following figure. There are three sections: list property, table property, and display set.

Table property	List Display set	
Display Set	the second se	List font same as title
	Preset text set: Input direct Use Text lib Data column dynamic show Dynamic set by column	(tip: bit0 is Off show first column, else hide,etc.)
	Output select row data to var Trigger variab	
	Use Name Title name set	0 MoveUp
	2 🗷 Date Date	0 MoveDown
	3 Z Time Time	0 DefaultSort
	Explain: display char num is 0 means show all.	in
	Communication State Display Set Unknow exception Timeout	Error Disconnect
	Label: w exception Label: Time out Text lib: Text lib: Text lib: Text lib:	Label: Error Label: Disconnect Text lib: Text lib: Text lib: Text lib

		List Property Description				
	Language independent	Effective after checking. Table title bar does not change with language switching				
	Show title bar	Effective after checking. Show Title Bar Content				
	List font same as title	Effective after checking. Keep the font in the table consistent with the title bar				
	Set font by column	Effective after checking. Set fonts separately for each column				
List Display	Preset text set	You can choose to directly input text labels. If you want to use a text library label, you need to check the text library				
set	Data column dynamic	Using the bit control of a word variable to display the column, the first column				
	show	is displayed when bit0 is 0, hidden when bit1 is 1, bit1 controls the second				
		column, and so on				
	Dynamic set by column	Use bitwise variables to individually control column display. Display when				
		variable is 0, hide when variable is 1				
	Output select row data	Respectively correspond to column bind variables and output the selected row				
	to var	data to the bind variables				
Communicate	Unknown	Label setting when unknown exceptions occur in communication. Text library				
State Display		is available				
State Display	Timeout	Label setting when communication timeout occurs. Text library is available				
500	Error	Label setting in case of communication error. Text library is available				

Di	isconnect	Label setting when communication is not connected. Text library is available

Đ	Communication[CT_	0001]	×
ic r	List property Table property Display Set	Table Drawing Image: Show browser control Image: Dorder Image:	
	Help ID:	1 Describe:	K Cancel

• Table Property: mainly used to set table drawing, cell display, etc.

Check whether to display the browsing control box, whether to display the border, row and column split lines, as well as the types, width and color of the line.

Set the background color of the title bar, table, selected color, row spacing, and column spacing. If the interlaced background color is checked, you can also set the interlaced background color;

Table setting variables, including total number of entries, number of displayed entries per page, etc.

List property	Location						Size					
Table property	C Lock	х	1	τY	1	¢	Fixed Ratio	Width	723	C Height	100	
Display Set	Translucent -											
	transparency		50			0						
	Display/Hide Always Display Condition Disp 											

• Display set: modify the position and size of the table, etc.

8.7.2 User

Components that display user information in a table format during configuration

Kinco DToolsPro-Configuration editing software

list property	List Display set					
Table property	1					
Display Set	Eanguage independent					
	Show title bar	itle font set 📃 📃 List font	same as title 👘 List font set 👘 S	et font by column		
	Preset text set: . Input	direct 💿 Use Text lib Dis	play languag Chinese(Simplified Han)			
	🗖 Data column dynami	c show	(tip: bit0 is Off show first column, e	lse hide,etc.)		
	Dynamic set by colur					
	Output select row da					
	Use Name	Title name set	Show char num	MoveUp		
	1 🗷 No.	No.	0 0			
	2 🗵 User name	User name	0	MoveDown		
	3 🛛 Permission	Permission group	0	DefaultSort		
	A DI Hear Stata	I lear Stata	0	·		
	Explain: display char nur	n is 0 means show all.				
	Display Property Set					
	Disable	Enable	Not show hidden up	ser		
	Label: Disable	Label: Enab	Show user set:			
	Text lib:			nly enable		
		- Text lib:	Only disable D	mamic set		
	Text Iil	b	Text lib Dynamic set var:	interine see		
			Tio: the war value is 1 o			

8.7.2.1 List Property

Dr User[UT_0001]		×		
List property Table property Display Set	Table Drawing Image: Show browser control Total entries Current/Total page Page down/up button Display grid line: Image: Separator line Image: Separator line Image: Separator line Border line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator line Image: Separator line Image: Separator line type: Image: Separator line Image: Separator			
ic r				
Help ID:	1 Describe: OK G	ancel		

List Property Description

Language independence	Effective after checking. List title bar does not change with language switching
Show Title Bar	Effective after checking. Show Title Bar Content
List font same as title	Effective after checking. Keep the font in the list consistent with the title bar
Set Font by Column	Effective after checking. Set fonts separately for each column
Preset Text Set	You can choose to directly input text labels. If you want to use a text library label, you need to
	check the text library
Data column dynamic	Use the bit control column display of word variables. When bit0 is 0, the first column is
show	displayed, when it is 1, it is hidden, bit1 controls the second column, and so on
Dynamic set by column	Use bitwise variables to individually control the column display. Display when the variable is
	0, hide when the variable is 1
Output selected row data	Respectively correspond to column bind variables and output the selected row data to the bind
to var	variables

isable		Enable		Not show hidden user
abel:	Disable	Label:	Enable	Show user set:
Fext lib:		Text lib:		All Only enable
	Text lib		Text lib	📀 Only disable 💍 Dynamic set
	Teacing		Text no	Dynamic set var:

	List Display Property Description
Disable	Set the status label for disabled users. Text library labels can be used.
Enable	Set the status label of the enabled users. Text library labels can be used.
Not show hidden user	Effective after checking. Do not display hidden user information
Show user set	Select the category for displaying user information. When "only enable" is checked, only users
	with enabled status will be displayed. "All" are checked by default

8.7.2.2 Table Property

Table drawing and cell display

Table Drawing	
Show browser control	Total entries Current/Total page Page down/up button
Display grid line: 💟 bor	ler 🧭 horizentol line 🔍 vertical line
Border line type:	
Separator line type:	🔷 🔹 Separator line width: 💼 🔹 🔳 Sprt Color 🔹 📝
📕 Title back co 👻 📝	Table back c 👻 📝 📄 Interlaced back color
Select cold * 📝 Roy	gap 5 🗘 Column gap 20 🗘

	Table drawing and cell display description
Show browser control	If checked, a browsing control box with a setting icon will be displayed on the user component
Total entries	Display the total number of users for the user component. Effective after checking the [Display browsing control box]
Current/Total page	Display the current page and total number of pages of the user component. Effective after checking the [Display browsing control box]

Page down/up button	Users on each page can be displayed by clicking the up and down switch button. Effective after
i ugo dowir up button	checking the [Display browsing control box]
Display grid line	Set display borders, row separators, and column separators
Border line type	Set the border line type
Border line width	Set border line width
Border line color	Set the outer frame color. The color picker can absorb all the colors on the computer screen at this time
Separator line type	Set Separation Line type
Separator line color	Set the color of the separator line. The color picker can absorb all the colors on the computer screen at this time
Title background color	Set the background color of the title bar. The color picker can absorb all the colors on the computer screen at this time
Table background color	Set the table background color. The color picker can absorb all the colors on the computer screen at this time
Interlaced background color	Check to take effect. Set the background color for separating rows between two rows
Select color	Set the color of the selected user information, and the color picker can absorb all colors on the computer screen at this time
Row gap	Set data table row spacing
Column gap	Set data table column spacing
Content exceeds table	Truncation: Exceeding content is truncated
width	Scroll: Content scrolling displays all

Table Set					
Total entries					
Single page entry nu 10	:				
Delete select row		Trigger type:	Off->On *		
Export Set					
Export device:	HMI	-	🔲 Use dynamic device		
Export subfolder:			🔲 Use dynamic subfolder		
Trigger van			Trigger type:	off->on(auto reset)	
Export file name prefix			🔲 Use dynamic file name prefix		
File name not export time			Export file format:	CSV	+
Show export button	e encrypt Pas		Export file format:		

Table Set and Export Set Instructions		
Total entries	Display the current total number of users using word variables	
Single page entry num	Set the number of users displayed on each page	
Export device	Export and save the displayed user components to an external storage device	
Use dynamic device	Dynamically setting export devices using string variables	
Export subfolder	Set the sub folder name for exporting user information. User information is saved by default in the "data/doc" folder of the project root directory	
Use dynamic subfolder	Using string variables to dynamically set sub folder names	
Trigger variable	Set variables that trigger export	

Trigger type	Set the trigger type of the trigger variable
Export file name prefix	Set the file name prefix for the exported user, and the default combination of date and time for the file name
Use dynamic file name prefix	Using string variables to dynamically set the file name prefix
File name not export time	If checked, the exported file name does not include the export time
Export file format	Set the file format for exporting recipes, including CSV and PDF
Show export button	If checked, the export button will be displayed on the component
File encrypt	If checked, the exported file format is a compressed package, and a password is required to successfully extract the file. If [File Encrypt] is not checked, the exported file format is the file format set in the [Export File Format] option. Simply open the file
Password	Use string variables to dynamically set the password for file encryption, which is valid when [File Encryption] is checked

8.7.3 Database table

The database table component displays the content in the database in the form of reports. Used in conjunction with <u>Chapter</u> 8.3.1.11 <u>Database Action Settings</u> and <u>Chapter10.1 Network Database</u>.

List property	Font Set Colum	nn Set				
Table property Display Set	Databa	ase table name	newtable1			
Uspiay Sec	Trigge	r set off->on *	Trigger variable	NETO Device1 0X1		
	Title set 🔍 Sho	w title bar			Title font set	
	List font se 🛅 List	font same as title	Set font b	y column	List font set	
	Preset text 💌 Inpo	ut direct 🛛 👩 Use Text lib	Display lan	guag Chinese(Simplifie	ed Han) 📑 🔚 Language indepe	enden
	Name	Title name set	Num format		Show char num	
	✓ No.	No.	Set	0		0
	🗵 column1	column1	Set	0		
	Mc	vetlp	Move	Down	DefaultSort	

8.7.3.1 List property set

• Font Set

	-				
	Database	table name	newtable1	*	
	Trigger se	et off->on	 Trigger variable 	NET0 Device1 0X1	
Title set	Show t	title bar			Title font set
List font se 🛅 List font same as title			Set font b	w column	List font set
				.,	LIST FOR SEC
	t 🔹 Input d	direct 👘 Use Tex		guag Chinese(Simplifie	
Preset tex	t 🔹 Input o	direct 💿 Use Tex Title name set	xt lib Display lan	guag Chinese(Simplifie	
Preset tex	lame		xt lib Display lan	guag Chinese(Simplifie	ed Han) 🔹 🖻 Language independen

List Property Set- Font Set description			
Database table name	Select the required database tables in both local and remote databases		
Trigger set	When the set bit variable meets the conditions, query the data.		
	off->on	Only when the state of the positioning variable changes from off to	
		on will the query data be triggered	
	on->off	Only when the state of the positioning variable changes from on to	
		off will the query data be triggered	
	off<->on	Only when the state of the positioning variable changes, will the	
		query data be triggered	
	off->on (automatic	The query data is only triggered when the state of the positioning	
	reset)	variable changes from off to on. Automatically reset the positioning	
		variable state after triggering	
	on->off (automatic	The query data is only triggered when the state of the positioning	
	reset)	variable changes from on to off. Automatically reset the positioning	
		variable state after triggering	
Language independent	Effective after checking, the	he table title bar does not change with language switching.	
Title font set	Effective after checking, displaying the content of the title bar		
	List font same as the	Effective after checking. Keep the font in the table consistent with	
List font set	title	the title bar	
	Set Font by Column	Effective after checking. Set fonts separately for each column	
Preset text	You can choose to directly	y input text labels. If you want to use a text library label, you need to	
	check the text library		

Column Set

Dynamic set Data transfer		Column Column Column (tip: bit0 is Off s Output selec	how first co	olumn, else hide,et	tc.)		
		Trigger set	off->on			Trigger variable:	
٣.	Name	Title na	ame set	Num format		Show char num	
	Name No.	Title na	ime set	Num format Set	0	Show char num	•

	List Property Set-Column Set Description
Dynamic set	Use the bit control column display of word variables. Display the first column when bit0 is 0, and hide
(Data column)	it when bit0 is 1; Bit1 controls the second column, and so on
Dynamic set	Use bitwise variables to individually control column display. Display when variable is 0, hide when
(Column)	variable is 1
Output select row	Respectively correspond to column bind variables and output the selected row data to the bind
data to var	variables
Num format	Field types include 8-bit signed numbers, 8-bit unsigned numbers, 16-bit signed numbers, 16-bit
	unsigned numbers, 32-bit signed numbers, 32-bit unsigned numbers, 64-bit signed numbers, 64-bit
	unsigned numbers, single precision, and double precision. Support setting numerical format display
	separately. Please refer to 8.4 Data Display for details of the numeric format

8.7.3.2 Table Property

• Item Set

Totabase browsing[DR_0001]	
List property	Item set Table Drawing Dynamic Color
Table property	Show browser control
SwitchFunction	
Display Set	✓ Total entries ✓ Current/Total page ✓ Page down/up button Table set Total entries
	Single page entry num:
	Touch select type Select by row *
	Row variable
	Column variable
Help ID: 1	Describe: OK Cancel

Item Set description			
Show browse	If checked, the browsing control box with the setting icon will be displayed on the database table		
Total entries	The total number of entries in the current database table. Valid when [Show Browsing Control Box] is checked		
Current/Total page(s)	The current page of the table and the total number of pages are displayed.		
Page down/up	Pages can be scrolled up and down		
Table set – Total entries	When the variable is checked and associated, the total number of entries is output to the variable.		
Single page entry num	Set the number of entries per page to be displayed		
Trigger select type	It is divided into select by row and select by cell		
Row variable	A numeric variable, that holds the number of rows		
Column variable	A numeric variable that holds the number of columns		

Table Drawing ۲

Di	Database browsing[DR_0001]	
E .4	Database browsing[Dit_0001]	

Br Database browsing[DR_0001]	×
List property List property Item set Table Drawing Dynamic Color Table property Image: Color Co	
Switch Function Display grid line: Display grid line: Border I ine type: Border line width: Separator line type: Separator line width: Separator line type: Title back color Select color Select color Select color Separator	
Help ID: 1 Describe: OK Cancel	

Table Drawing description		
Display grid line	Set display borders, row separators, and column separators	
Border line type	Set the border line type	
Border line width	Set border line width	
Border line color	Set the outer frame color. The color picker can absorb all the colors on the computer screen at this time	
Separator line type	Set Separation Line type	
Separator line width	Setting separator line width is currently not supported	
Separator line color	Set the color of the separator line. The color picker can absorb all the colors on the computer screen at this time	
Title background color	Set the background color of the title bar. The color picker can absorb all the colors on the computer screen at this time	
Table background color	Set the table background color. The color picker can absorb all the colors on the computer screen at this time	
Interlaced background color	Check to take effect. Set the background color for separating rows between two rows	
Select color	Set the color of the selected user information, and the color picker can absorb all colors on the computer screen at this time	
Row gap	Set data table row spacing	
Column gap	Set data table column spacing	
Date format	Format the date contained in the field	
Date separator	Set the separator for the date contained in the field	
Show 4-digit year	After checking, the year can be displayed in 4 digits, otherwise it will be displayed in 2 digits. For example, for the year 2008, it displays "2008" if [Show 4-digit year] is selected; If [Show 4-digit year] is not selected, only 2 digits will be displayed, i.e. '08'	
Time format	Format the time contained in the field	

Dynamic Color

Database browsing[DR_0001]	11]	
List property	Item set Table Drawing Dynamic Color	
Table property		
SwitchFunction	Allow dynamic colors setting	
Display Set	 Display dynamic colors by row 	
	Mode Field Channel State Counts	
	State mode * column1 * 2	
	State mode * column1 * 2	
	State ID State Value Color	
	1 0 ‡ color • tran	sparent
	2 1 ¢ color v tran	sparent
Help ID: 1	Describe:	OK Cancel
nop ID.		OK Califer

Dynamic Color description		
Allow Dynamic color Settings	If this parameter is selected, dynamic colors are allowed	
Display Dynamic colors by row	Display the dynamic colors of the Settings by row	
Mode	state mode	
Field Selection	The field cannot be empty. The field type can be bits, 8-64 bits, or floating point. Other types of the above types cannot be selected	
State Counts	 If the field is a bit, there are 2 rows by default. The number of states is 1 and 2; The status values are 0 and 1; Floating-point and word, the default has 1 line, the number of states is 1; The status value is 0; Change the number of states, the default state value is [state ID-1], the range is determined according to the field type; 	
State ID	The default value cannot be modified	
State Value	 If the field is a bit, there are 2 rows by default. The number of states is 1 and 2; The status values are 0 and 1; Floating-point and word, the default has 1 line, the number of states is 1; The status value is 0; Change the number of states, the default state value is [state ID-1], the range is determined according to the field type; 	
Color	When the data in a field is equal to the status value, the corresponding status value color is displayed in the row to which the field belongs	

8.7.3.3 Switch Function

Touching any area of the database table component can trigger the actions set in the touch "SwitchFunction" attribute, and can execute corresponding bit trigger actions, database actions, etc., including complete switch functions.

Note:

1. When using 'Output Selected Row Data to Variables' at the same time, priority is given to executing the action of outputting the selected row, followed by executing the switch function action

Totabase browsing[DR_0001]	
List property	Font Set Column Set
- Table property	Dynamic set Column
Display Set	(tip: bit0 is Off show first column, else hide,etc.) Data transfer ✓ Output select row data to var Seq.1
	Trigger set off->on
	Sort mode

2. When selecting by row/by cell, assign values to the row and column variables. When the variable values change, automatically selecting the row and column will also trigger the switch action of the touch database table browsing component

property	Item set Table Drawing	Dynamic Color
l <mark>e property</mark> tchFunction play Set	Show browser control	rrent/Total page Z Page down/up button
	Table set	
	Total entries	总条目数
	Single page entry num:	1000 ‡
	Select type	
	Touch select type	Select by cell *
	Row variable	row
	Column variable	MW12

For the introduction of "Switch Functions", refer to the directory "8.1.4 Switch Functions". <u>Click to jump to the introduction</u> of "8.1.4 Set switch functions"

8.7.3.4 Display Set

Locatio	n						Size					
C Lock		х	1	≎ Y	1	\$	Fixed Ratio	Width	569	Height	100	\$
Tran	slucent											
transpa	rency		50			÷						
Display	/Hide											
Alwa	ys Display											
				unicate when								
	ority Control			0:Administra	atc =							
	ess Control	E False	e state wo	rk								
Expres												
Ad	d Del	ete										
			-									
ID	Operation		Express	Paren	theses							

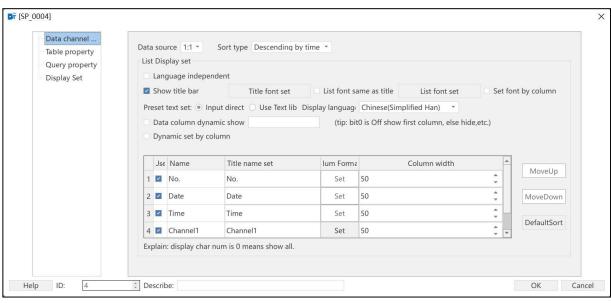
	Display set description						
Lock	Set whether the position of the component is locked						
Fixed ratio	Set the size of the component and calculate the corresponding width or height proportionally. The ratio is						
of width and	the ratio of width to height before selecting [Fixed Ratio].						
height							
	Always display: Check to indicate that the current component remains displayed						
	Condition display: Includes permission control, expression control, no communication when components						
	are hidden, and false status takes effect						
	① Authority control:Support multiple permissions control, check that the operator needs to meet the						
Diamlan /IIi d	multiple permissions of the component to display the current component.						
Display/Hid e	② Express control: Check to indicate that the current component can only be displayed when the state of						
	the specified bit or word variable meets the set conditions						
	③ Do not communicate when hidden: When the variables used by components are External variable,						
	check this option, and components will not communicate when they are hidden						
	④ False state work: Takes effect when in an error state						

8.7.4 History data

History data is used to display the data of the data sampling background, which can be set up for real-time data reading, historical data query reading, data export and other functions.

【Historical Data Components】 screen

Kinco DToolsPro-Configuration editing software



8.7.4.1 Data Channel Properties

Hi	storical Data - De	scription of Dat	a Channel Prop	erties					
	Select the samp		o the data samp Data Sample 🗵	le					
	ID/Description/Sample Variable								
	+ 🖻 🛋 🐚 🚯								
	ID	Description	Sample Variable	Method	Cycle/Trigger Addr				
	1	Basic	MWO	Cycle	100MilliSec				
Data source	2	Basic1	MW0	Cycle	1Sec				
	D [™] [SP_0001]								
	Data chann Table prop Query prop Display Set	Data Data List	source 1:Basic * Display set .anguage independent Show title bar	Sort type Descenc	ling by time *				
Sort type	Set the sorting n								
Language independent	The checkbox is valid, the selection box after "Show language" is invalid and the component shows the default language								
Show title bar	Check to take effect, the component displays the content of the title bar, the default check								
Title font set	Set the title bar is checked	font related pro	operties, this is	only valid wh	en [Show Title Bar]				
list font as title	Checked to take	effect, the list	font properties a	and title bar fo	ont properties consistent				
List Font Set	Set the propertie	es related to the	list font						
Set font by column	Check to take effect, the event properties of the data table will appear in "column font settings" content, you can set the font properties of each colu separately								
Preset text set	You can choose to enter the text label directly, if you want to use the text library label need to check the text library								
Display Language	Set the title bar bar is valid w		anguage is not i	relevant] is u	inchecked, Show title				
Dynamic columns dynamic show	Use the bits of t first column, 1 t				ay, bit0 is 0 to show the d so on				
Dynamic set by column	Use bit variable	s to individually	y control colum	n display, sho	w when 0, hide when 1				
Move up	When the data	table row is sel	lected, click	Move Up] t	o move up the selected				

	row. Except for the first row of the data table is selected, the [Move Up] button									
	is valid									
	When a data table row is selected, click [Move Down] to move down the									
Move down	selected row. Except for the last row of the data table is selected, the [Move									
	Down button is valid									
Default Sort	Restore to the original sorting of the data table									
	Set the display format of the channel									
	Use Name Title name set Num Format Column width MoveUp									
	1 🖬 No. No. Set 50									
	2 Z Date Date Set 50 Advancement									
Numerical format	3 🖬 Time Time Set									
Tumerica Tornia	4 Z Channel1 Channel1 Set Type: Decimal • LeadingZero PositiveSign									
	Explain: display char num is 0 means show all.									
	Integer: 3 C Decimal: 0 C									
	Describe: OK Cancel									
Display characters	The number of characters displayed can be set									

8.7.4.2 Table Property

- Data channel Table property	Table Drawing Table Setting Export Setting
Query property Display Set	Table Drawing Image: Show browser control Image: Total entries Image: Total entritentries
	Border line type: Border line width: Border cold Border cold Border cold Separator line width: Sprt Color Sprt Color Title back co Table back cd Interlaced back color

		Historical Data - Table Property Descriptio					
	Show Browse Control	Check the browsing control box that displays the settings icon on the history data component, containing the total number of entries, the current page/total pages, and the content of the up/down page toggle button (provided all three options are checked)					
	Current Page/Total Pages	The current page and the total number of pages of current data information displayed in the history data element are valid when [Show Browse Control] and [Paging Display] are checked.					
	Page up/down switch button	Used to page up and down the history data, effective when [Show Browse Control] and [Paging] are checked					
	Show Spacer	Set the display outer frame, row dividers and column dividers					
	Border line type	Set the outer frame line type					
	Border line width	Set the outer frame line width					
Table Drawing	Border color	Set the color of the outer frame, the color picker can absorb all the colors on the computer screen at this time					
-	Separator line type	Set separator line type					
	Separator line width	Set separator line type					
	Separator color	Set the separator color, the color picker can absorb all the colors on the computer screen at this time					
	Title background color	Set the background color of the title bar, the color picker can absorb all the colors or the computer screen at this time					
	Tablebackgroundcolor	Set the table background color, the color picker can absorb all the colors on the computer screen at this time					
	Interlaced background color	Set the background color of the line separating two rows					
	Selected colors	Set the color of the selected history data, the color picker can absorb all the colors on the computer screen at this time					
	Row spacing	Set data table row spacing					

	Column spacing	Set data table column spacing					
	Date Format	Set the format of the sampling information date					
	Date separator	Set the separator for the date of the sampling information					
	Display 4-digit year	Check the year to display 4 digits, otherwise display 2 digits. Such as 2008, then display "2008"; unchecked, then only display 2 digits, that is, "08"					
Table	Time Format	Set the format of the historical data time					
setting	Display content beyond the table width	When the content of historical data exceeds the width of the table, you can check Truncate or Scroll. If set to scroll, you can set the scrolling step and speed					
	Total number of entries	Use the word variable to display the total number of data entries for the current historical data					
	Number of entries per page	Use constants to set the number of entries per page to display historical data					
	Export Devices	Export and save the data displayed by the current historical data element to an external storage devic					
	Using dynamic devices	Dynamically set the export device using string variables					
	Export subfolder	Set the name of the subfolder for exporting history data, if this item is empty, the history data will be saved in the "data" folder in the project root directory by default.					
	Using dynamic subfolders	Set subfolder names dynamically using string variables					
	Trigger variables	Set the variables that trigger the export					
	Trigger Ty	Set the trigger type of the trigger variable					
export setting	Export file name prefix	Set the file name prefix for exporting historical data, the file name defaults to a combination of date and time					
	Use dynamic file name prefixes	Dynamically set file name prefixes using string variables					
	File name does not include export time	Check this box to exclude the export time from the export file name					
	Export file format	Export historical data in file format, including CSV and PDF					
	Show Export button	The Export button will be displayed on the component if it is checked					
	File Encryption	If [File Encryption] is unchecked, the exported file format is the file format set in					
	гие енстурион	the [Export File Format] option, and you can open the file directly.					
	Dynamic Password	Dynamically set the password for file encryption using string variables					

8.7.4.3 Query Function

Data channel Table property	Query Function		
Query property	Query status variable:		
Display Set	Query trigger variable:	Trigger type Off->On	*
		e search variable be checked, if the	earch status, execute once search operator after search search variable's value is OFF, element is in browse state, tl rch status.

	Historical data-query setting instructions						
Using the query	Check the historical data query function as needed						
function	Unchecked: all historical data can be displayed without query, real-time data is displayed						
	Check: Open the query function, and display the corresponding historical data after the query is						
	triggered						
Query status	The query status variable can be used to toggle whether the query is enabled or not, ON to enable,						
variables	OFF to display all						
Query Trigger	The query status variable is unchecked, and a query is executed after the query trigger variable						
Variables	meets the trigger method.						
	The query status variable is checked, and when the status variable is ON, the query trigger variable						
	will execute a query after meeting the trigger mode; when the status variable is OFF, the query						
	function is disabled, and all the historical data will be displayed						

8.7.4.4 Display Set

Data channel	Location						Size					
Table property	Lock	Х	1	¢Υ	1	÷	Fixed Ratio	Width	723	‡ Height	100	÷
Query property Display Set	Translucent transparency		50			÷						
	Display/Hide	olay 🔿 Cor	ndition Di	splay 🗆 Do	not comn	nunicate	when hidden					

	Historical data - Display setting instruction						
Location	Set whether the position of the component is locked or not						
Size	Set the size of the component to calculate the corresponding width or height in proportion. The ratio is the ratio of width and height before [Fixed Ratio] is checked						
Display/Hid e	 Show all the time: Check to keep the current component displayed all the time Conditional display: including permission control, expression control, no communication when the component is hidden and False state is in effect ① Permission Control: Support multiple permissions control, check that the operator needs to meet the multiple permissions of the component to display the current component. ②Expression control: Checking indicates that the current component can be displayed only when the state of the specified bit variable or word variable meets the set conditions. ③No communication when the component is hidden: When the variable used by the component is an external variable, check this option, the component will not communicate when it is hidden. ④False status takes effect: When the error status takes effect 						

Off-line simulation effects:

ŖЪ.	Date	Time	Channel1	
69	23-06-13	15:10:24	66	Variable period 1
68	23-06-13	15:10:24	66	
67	23-06-13	15:10:24	66	Channell 66
66	23-06-13	15:10:24	66	Channel1 66
65	23-06-13	15:10:23	66	
64	23-06-13	15:10:23	66	
63	23-06-13	15.10.23	66	

8.7.5 Recipe

As shown in the following figure, the recipe in the information list is a recipe display component that needs to be used in conjunction with the recipe setting function in the project. The recipe group in the figure below is set by yourself in the recipe setting in the project list. This control is only for recipe display. Select the desired recipe group to set accordingly. Please refer to <u>Chapter 16: Recipe</u> for the recipe settings.

The recipe components mainly include four sections: list display, recipe query, table property, and display set.

8.7.5.1 List Property

Br Recipe browsing[R]	T_0001]				×
List Display Recipe Query Table property Display Set	Recipe group: Default Re List Display set Language independe Show title bar Preset text set: Input Data column dynami Dynamic set by colum	nt Title font set direct Use Text lib c show	and the second second second	as title List font set inese(Simplified Han) * Off show first column, else hide,e	Set font by column
	Use Name	Title name set	Num Format	Show char num	MoveUp
	1 🗷 Recipe No	Recipe No	Set	0	:
	2 🗵 Recipe Name	Recipe Name	Set	0	MoveDown
	3 🗹 one	one	Set	0	DefaultSort
	4 🗹 two	two	Set	0	· ·
	Explain: display char nur	n is 0 means show all.			
Help ID:	1 Construction				OK Cancel

List Property description				
Language independent	Effective after checking. The table title bar does not change with language switching			
Show title bar	Effective after checking. Display the content of the title bar			
List font same as title	Effective after checking. Keep the font in the table consistent with the title bar			
Set font by column	Effective after checking. Set fonts separately for each column			
Preset text set	You can choose to directly input text labels. If you want to use a text library label, you			
	need to check the text library			
Data column dynamic show	Use the bit control column display of word variables. When bit0 is 0, the first column is			
	displayed, when it is 1, it is hidden, bit1 controls the second column, and so on			
Dynamic set by column	Use bitwise variables to individually control the column display. Display when the			
	variable is 0, hide when the variable is 1			
Output the data of the	Respectively correspond to column bind variables and output the selected row data to the			
selected row to variable	bind variables			

8.7.5.2 Recipe query

Query status variable:			
Query trigger variable:	Trigger type	Off->On	-
1:When the query trigger variat			ed according
to the set conditions. When it is			ed accordii

Query function	Check the formula query function as needed
	Unchecked: Display all recipe data without querying
	Check: Enable query function
Query status	The query status variable can be used to switch whether to enable the query. It is enabled when it is
variable	ON and all are displayed when it is OFF
Query trigger	When the query status variable is not checked, execute a query once the trigger variable meets the
variable	trigger method
	Check the query status variable, and when the status variable is ON, execute a query once the
	trigger variable meets the trigger method. When the status variable is OFF, the query function fails
	and all recipe data is displayed

8.7.5.3 Table Property

ist Display	Table Drawing Table Setting Export Setting
lecipe Query	Table Drawing
able property	Show browser control 🗸 Total entries 🗸 Current/Total page 🗸 Page down/up button
Display Set	Display grid line: void entries void entrie
	Border line type:* Border line width:* Border color *
	Separator line type: * Separator line width: * Sprt Color *
	Title back color *
	Select color v 📝 Row gap 5 🗘 Column gap 20 ‡

Table Drawing description					
Show browser control	If checked, a browsing control box with a setting icon will be displayed on the recipe				
Show browser control	component				
Tradica	The total number of recipes for the current recipe element. Effective when checking [Show				
Total entries	browser control box.				
Current /Total Page	If this parameter is selected, the current page count and total page count are displayed				
Page down/up button	if this parameter is selected, the up-down switch button is displayed				
Display grid line	Set Displaysof the outer frame, row divider, and column divider				
Border line type	Set the border line type				
Border line width	Set border line width				
Border color	Set the color of the outer frame, and the color picker can absorb all the colors on the computer				
bolder color	screen at this time				
Separator line type	Set Split Line type				
Separator line width	Set Split Line type				
Sprt Color	Set the split line color. The color picker can absorb all the colors on the computer screen at this				
Spit Color	time				

Title background color	Set the background color of the title bar. The color picker can absorb all the colors on the computer screen at this time				
T 1 1 1 1 1	Set the table background color. The color picker can absorb all the colors on the computer				
Table background color	screen at this time				
Interlaced background color	Set the background color for separating rows between two rows				
Select color	Set the color of the selected event information. The color picker can absorb all the colors on the computer screen at this time				
Row gap	Set data table row spacing				
Column gap	Set data table column spacing				
Total entries	Use word variables to display the total number of recipes for the current recipe component				
Delete Selected Rows	Use the state control of bit variables to delete the currently selected event information. When checked, the [Trigger Type] is valid				
Export device	Export and save the displayed recipe of the current recipe component in an external storage device				
Use dynamic device	Dynamically setting export devices using string variables				
Export subfolder	Set the name of the sub folder for exporting event information. If this option is blank, the event information will be saved in the "data" path of the project root directory by default during offline simulation. On screen, it is saved in the "disk/hmi" path by default				
Use dynamic subfolder	Dynamically setting the name of a subfolder using string variables				
Trigger var	Set variables that trigger export				
Trigger type	Set the trigger type of the trigger variable				
Export file name prefix	Set the file name prefix for exporting the recipe, with a default combination of date and time for the file name				
Use dynamic file name prefix	Using string variables to dynamically set the file name prefix				
File name do not include export time	If checked, the exported file name does not include the export time				
Export file format	Set the file format for exporting recipes, including CSV and PDF				
Show export button	If checked, the export button will be displayed on the component				
File encrypt	If checked, the exported file format is a compressed package, and a password is required to successfully extract the file. If [File Encrypt] is not checked, the exported file format is the file format set in the [Export File Format] option and can be opened directly				
Dynamic password	Dynamically setting the password for file encryption using string variables				

• Table setting

lisplay	Table Drawing Table Setting	Export Setting			
e Query	Table Set				
property	Total entries				
ay Set	Single page entry num:	10	* *		
	Table Edit				
	Edit status:				
	Save trigger variable:		Trigger type:	Off->On 👻	

Table setting description				
Total Entries	When checked, the total number of recipes for the current recipe component is displayed;			
Single page entry num	Number of recipe data pieces displayed per page			
Edit status	bit variable, enter the edit state when it is 1, click the cell to change the table content; Exit edit status for 0 to restore cell content and clear edit content;			
Save trigger variable	bit variable, when the trigger condition is met, save the change table content and exit the editing state;			

• Export Setting

t Display	Table Drawing Table Setting	Export Setting			
cipe Query	☑ Export Set				
Table property	Export device:	HMI -	Use dynamic device		
olay Set	Export subfolder:		Use dynamic subfolder		
	Trigger var:		Trigger type:	off->on(auto reset) *	
	 Export file name prefix 		9 Use dynamic file name p	refix	
	File name not export tiime		Export file format:	CSV *	
		File encrypt Password:	Dynamic	password	

Export Setting description				
Export device	Export and save the displayed user components to an external storage device			
Use dynamic device	Dynamically setting export devices using string variables			
Export subfolder	Set the name of the subfolder to which the recipe data is exported. If this parameter is empty, it will be saved in disk/hmi for offline simulation. On the screen, it is saved under /hmi_data/disk/hmi			
Use dynamic subfolder	Using string variables to dynamically set sub folder names			
Trigger variable	Set variables that trigger export			
Trigger type	Set the trigger type of the trigger variable			
Export file name prefix	Set the file name prefix for the exported user, and the default combination of date and time for the file name			
Use dynamic file name prefix	Using string variables to dynamically set the file name prefix			
File name not export time	If checked, the exported file name does not include the export time			
Export file format	Set the file format for exporting recipes, including CSV and PDF			
Show export button	If checked, the export button will be displayed on the component			
File encrypt	If checked, the exported file format is a compressed package, and a password is required to successfully extract the file. If [File Encrypt] is not checked, the exported file format is the file format set in the [Export File Format] option. Simply open the file			
Dynamic password	Use string variables to dynamically set the password for file encryption, which is valid when [File Encryption] is checked			

8.7.5.4 Display Set

List Display Recipe Query	Location	x	1	C Y	1	5	Size	Width	723	Height	100	\$
Table property	Translucent											
Display Set	transparency		50			\$						
	Display/Hide Always Display Condition Display 			nunicate wł								

	Display set description
Lock	Set whether the position of the component is locked
Fixed ratio of width and height	Set the size of the component and calculate the corresponding width or height proportionally. The ratio is the ratio of width to height before selecting [Fixed Ratio].
Display/Hide	Always display: Check to indicate that the current component remains displayed Condition display: Includes permission control, expression control, no communication when components are hidden, and false status takes effect ① Authority control: Support multiple permissions control, check that the operator needs to meet the multiple permissions of the component to display the current component. ② Express control: Check to indicate that the current component can only be displayed when the state of the specified bit or word variable meets the set conditions ③ Do not communicate when hidden: When the variables used by components are External variable, check this option, and components will not communicate when they are hidden
	④ False state work: Takes effect when in an error state

8.7.6 Event

Events can be recorded and displayed in the form of a table to display the user's actions on the HMI. The types of event display include operation logs, alarms, and electronic signatures. For specific registration settings, please refer to <u>Chapter 14</u> <u>Event/Alarm</u>, <u>Chapter 17 Operation logs</u>, and <u>Chapter 18 Electronic signature</u>.

1. In the **[**Event Property**]** dialog box of the Event component, corresponding properties can be set.

Dr Event[ET_0004]						×			
Evt property Table property Display Set	Sort type List Dis List Dis Lan Sho Preset Dat Dyr	ow: Operat e: Ascer play set guage indepen w title bar text set: Inj a column dyna namic set by co	or log Alarm E ading by time Desc adent Title font set put direct Use Text lib D armic show	(tip: bit0 is Off show		Set font by column			
		se Name	Title name set		w char num	MoveUp			
	1 3	No.	No.	0					
	2 8	2 🗷 Type	Туре	0		MoveDown			
	3 5	Date	Date	0		DefaultSort			
		Time		· •					
	Explain: display char num is 0 means show all.								
		vpe display set ator log I: Operator							
Help ID:	4	1 Descri	be:			OK Cancel			
			Event - Event I	Property Description					
Event Type		Can selec	et current or historical	events					

Event show	Effective after checking. To set the category for event display, it is necessary to open the

	corresponding record in the corresponding category
Sort type	Set the sorting method for event display on the current component
Language independent	Effective after checking. The selection box after 'Display Language' is invalid, the component displays the default language
Show Title Bar	Effective after checking. The component displays the title bar content. Checked by default
Title Font Set	Set the relevant properties of the title bar font, which is only valid when [Show Title Bar] is checked
List font same as title	Effective after checking. The font properties of the list are consistent with those of the title bar font
List Font Set	Set the relevant properties of the list font
Set Font by Column	Effective after checking. The data table in the event attributes will display the "Column Font Settings" content, and font attributes can be set separately for each column
Preset text set	You can choose to directly input text labels. If you want to use a text library label, you need to check the text library
Display Language	Set the language of the title bar. When 【Language Independent】 is not checked and 【Show Title Bar】 is checked, it is valid
Data column dynamic show	Use the bit control column display of word variables. When bit0 is 0, the first column is displayed, when it is 1, it is hidden, bit1 controls the second column, and so on
Dynamic set by column	Use bitwise variables to individually control the column display. Display when the variable is 0, hide when the variable is 1
Output select row data to var	Respectively correspond to column bind variables and output the selected row data to the bind variables. The display of variables takes effect based on the [trigger type] set by the [trigger variable].
Move Up	When selecting the row in the data table, click [Move Up] to move the selected row up. The [Move Up] button is valid except for selecting the first row of the data table
Move Down	When selecting a row in the data table, click [Move Down] to move the selected row down. The [Move Down] button is valid except for selecting the last row of the data table
Default sort	Restore to the original sorting of the data table
Event Type Display Set	Set the text content displayed in the "Type" column of the event table. When the "Type" column of the event table is checked, it is valid. You can modify the label content or use a text library

2. In the "Table Property" dialog box of the "Event" component, corresponding properties can be set.

Evt property	Table Drawing								
Table property									
Display Set	V Show browser control V Total entries V Current/Total page V Page down/up button								
	Display grid line: Displa								
	Border line type: • Border line width: • Border cok • I Separator line type: • Separator line width: • Sprt Color • I								
	Title back co *								
	Select colc + Row gap 5 : Column gap 20 :								
	Select con • [•] Now gap 5 • Column gap 20								
	Cell Display								
	Date Forma YY*MM*DD • Date Separator • 6 Show 4 digit year								
	Time Forma HH:MM:SS *								
	Content exceed table width: • truncation scroll								
	Content exceed table width: truncation Table Set								
	Content exceed table width: truncation Table Set Total entries								
	Content exceed table width: truncation Table Set								
	Content exceed table width: truncation scroll Table Set Table Set Total entries Single page entry nu 10 Delete select row Trigger type: Off->On								
	Content exceed table width: • truncation Table Set Total entries Single page entry nu 10 Delete select row Trigger type: Off->On Export Set								
	Content exceed table width: • truncation Table Set Total entries Single page entry nu Delete select row Trigger type: Off->On Export Set Export device:								
	Content exceed table width: • truncation Table Set Total entries Single page entry nu 10 Delete select row Trigger type: Off->On Export Set Export device: HMI Use dynamic device Export subfolder:								
	Content exceed table width: • truncation Table Set Total entries Single page entry nu Delete select row Trigger type: Off->On Export Set Export device:								

	Event - Table Property Description
Show browser control	If checked, a browsing control box with a setting icon will be displayed on the event component
Total entries	The total number of event information for the current event component. Effective when checking [Show browser control]
Display grid line	Set display borders, row split lines, and column split lines
Border line type	Set the border line type
Border line width	Set border line width
Border color	Set the outer frame color. The color picker can absorb all the colors on the computer screen at this time
Separator line type	Set Split Line type
Sprt Color	Set Split Line type
Title background color	Set the background color of the title bar. The color picker can absorb all the colors on the computer screen at this time
Table background color	Set the table background color. The color picker can absorb all the colors on the computer screen at this time
Interlaced background color	Effective after checking. Set the background color for separating rows between two rows
Select Color	Set the color of the selected event information. The color picker can absorb all colors on the computer screen at this time
Row gap	Set the row spacing of the data table
Column gap	Set column spacing for data tables
Date Format	Format the date of event information
Date Separator	Set the date separator for event information
Show 4-digit year	After checking, the year can be displayed in 4 digits, otherwise it will be displayed in 2 digits. For example, for the year 2008, it displays "2008" if [Show 4-digit year] is selected; If

	[Show 4-digit year] is not selected, only 2 digits will be displayed, i.e. '08'
Time format	Format the time of event information
Content exceeds table	When the event content exceeds the width of the table, truncation or scrolling can be checked.
width	When set to scroll, the step size and speed of scrolling can be set
Total entries	Use word variables to display the total number of event information for the current event component
Dalata al stalas	Use the state control of bit variables to delete the currently selected event information. When
Delete selected row	checked, the [Trigger Type] is valid
Export device	Export and save the event information displayed by the current event component in an external
Export device	storage device
Use dynamic device	Dynamically setting export devices using string variables
Export subfolder	Set the sub folder name for exporting event information. If this item is blank, the event
Export subfolder	information will be saved in the "data/doc" folder of the project root directory by default
Use dynamic subfolder	Dynamically setting the name of a subfolder using string variables
Trigger var	Set variables that trigger export
Trigger type	Set the trigger type of the trigger variable
Ennert file norme numfin	Set the file name prefix for exporting event information, with a default combination of date and
Export file name prefix	time for the file name
Use dynamic file name	Using string variables to dynamically set the file name prefix
prefix	
File name do not include	If checked, the exported file name does not include the export time
export time	
Export file format	Set the file format for exporting event information, including CSV and PDF
Show export button	If checked, the export button will be displayed on the component
	If checked, the exported file format is a compressed package, and a password is required to
File encrypt	successfully extract the file. If [File Encrypt] is not checked, the exported file format is the
	file format set in the 【Export File Format】 option and can be opened directly
Dunamia password	Dynamically setting the password for file encryption using string variables. Effective when
Dynamic password	selecting [file encrypt]

3. When the event type is a historical event, corresponding properties can be set in the "Event" component - "Evt search" dialog box.

Evt property Evt search Table property Display Set	Use search function Search state variable Search trigger variable: Trigger type: off->on
	Tip While the search variable not be checked, element always be wait for search status, execute once search operator after search trigger variable be trigged; while the search variable be checked, if the search variable's value is OFF, element is in browse state, th is invalid; if the search variable's value is ON, element be in wait for search status.

Description of Historical Event Query						
Use search	Select the event type as Historical Event to have this feature as needed					
function						
Search state	The query status variable can be used to switch whether query is allowed, and is allowed when it is					
variable	ON					
Search trigger	Bind variables. Execute the query after the variable meets the triggering method					
variable						

4. In the "Display Set" dialog box of the "Event" component, corresponding properties can be set.

Evt property Evt search Table property	Location Lock	x	1	C Y	1	÷	Size	Width	569	🗘 Height	100	¢
Display Set	transparency Display/Hide		50			÷						
	 Always Display Condition Disp 		not comr	nunicate wh	en hidder							

	Event - Display Set Description
Lock	Set whether the position of the component is locked
Fixed ratio of width and height	Set the size of the component and calculate the corresponding width or height proportionally. The ratio is the ratio of width to height before selecting [Fixed Ratio].
Display/Hid e	 Always display: Check to indicate that the current component remains displayed Condition display: Includes permission control, expression control, no communication when components are hidden, and false status takes effect ① Authority control:Support multiple permissions control, check that the operator needs to meet the multiple permissions of the component to display the current component. ② Express control: Check to indicate that the current component can only be displayed when the state of the specified bit or word variable meets the set conditions ③ Do not communicate when hidden: When the variables used by components are External variable, check this option, and components will not communicate when they are hidden ④ False state work: Takes effect when in an error state

8.7.7 I/O

I/O components are controls to view the bit status and description of label variables of byte or word length type. It is often used to monitor the status of PLC input and output points and their corresponding functions, and it is also possible to add multiple variables and switch the displayed content by modifying the value of the index variable.

When configuring, you can use "Component"(GE) \rightarrow "Information" \rightarrow "I/O" to set the component.

Comm View				California			đ	D:/DTools/	DToolsPro	/Test/bin/InitProject/	IO元件/IO元件.prod	
Comm View / □ □ ○ ᠿ ᠿ III ﷺ ﷺ ≶ Draw	1~0	jectFile IOT) 🛄 o Switch	DataD	Help 23 Display * n/Char	Alarm browsing - Alarm	Curve	Chart ,	Animation			
t 🗗 🗙		1:Basic Windo										
HMI:F2156E2-PX /	5			3			0		170		Ithoo	1250
NET0:192.16 NET1:192.16 GlobalSet ProjectSet		IO Wat Label Table pro Graphics Display Se	perty	16bit	h var type e(Simplified	Han)			* 3	Language ind	lependent	Font settings
HMIAuthori GlobalInteri Variable SystemVar	1350 -			Variab	le list				Imports	and exports contain t	ext descriptions 🛓	Import 🖆 Export
ExternalVar InternalVar Memory				0	Nur	mber Ind	ex ID			Variable	+	Text Library
 FlashVar PointerVar StructVar VariableGrout DataType Communication 												
= 🥌 COM 1: 0MO3 💳	-			Text Li	st							
COM2 :N	-			SI	tate ID	Text Descr	ible 9	State ID		Т	ext Describle	<u>*</u>
METO MET1	1750 1			2			10					
्रि USB1 :Ne क्रि IOT	-			▼ Title E	lar —				1			
MQTT	-			Shc ID	w title bar Use	Name	Displa	y Position		TitleBar nam	e setting	Column W*
- Databaco		Help	ID: 3	D.E.								

8.7.7.1 I/O Display

IO Watch	▼ IO De	scribe									
Label	IO watc	h var ty	pe Grou	up elements		Group S	witch	Variable			
Table property	1bit	-	* 8	,	Ŧ						
Graphics	Chines	e(Simpl	ified Han)		-	3	La	nguage	independent		
Display Set	Direct	nput			Ŧ						Font settings
	Group	list				Variable	list(G	roup())			
	+ 1		•				list(O	ioupo)			
		~	Gro	up ID			ľ	lumber	Vari	able	′ariable Des
		I)		*		0		MB0		
					÷		1		MB1		
							2		MB2]
							3		MB3]
	🗆 İmp	Imports and exports contain text descriptions					4		MB4		
	🕹 Im	La Import							1		•
	• Title Bar										
	🗹 Sho	w title	bar								
	ID	Use	Name	Display Position			Ti	tleBar na	ime setting		Column W*
	1	~	No.	Center 🔹	No.						50
	2	~	Variable address	Center 👻	Varia	ble addre	SS				50
	3	v	Description	Center 🝷	Desc	ription					50
	4										Þ
	1	-	Font setting	s 🗆 Same as t	he IO	descriptic	n fon	t			

Watch		escribe							
el		ch var t				IO watch switch inc	dex var		
le property	16bit		78-			* MW4 </td			
phics	Chine	se(Simp	olified Han)			🔹 🚱 🗌 Langua	ge independent		
play Set	Direct	input				*		Font s	settinas
	Varia	ole list							
	+	a	•		~	Imports and exports co	ntain text description	Limport 1	xport
			Number	Index ID		Variable		Text Library	
		-	1	0	MW0	4) +		ione Library	
	-				MW2				
	· · · · ·		r.		, 101002		47		
	Text L	ist							
	_	.ist State ID	Text	Describle	State ID		Text Describle		*
	_) Text	Describle	State ID 9		Text Describle		
	1) Text	Describle	9		Text Describle		
) Text	Describle			Text Describle		
	1	State ID) Text	Describle	9		Text Describle		*
	1 2 • Title	State ID		Describle	9		Text Describle		×
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	1 2 ▼ Title ☑ Sh	State ID Bar	e bar	ne Dis	9			Colun 50	v
	1 2 ▼ Title ☑ Sh	Bar	e bar Nam	ne Dis	9 10 splay Position nter * N				v
	Title ▼ Title ■ Sh 1 1	Bar ow title	e bar Nam No. Variable a	ne Dis Cer address Cer	9 10 splay Position nter * N nter * V	No. Variable address		50	v
	 1 2 Title ✓ Sh ID 1 2 	Bar ow title Use	e bar Nam	ne Dis Cer address Cer	9 10 splay Position nter * N nter * V	No.		50 50	v

		IO display description
IO watch	variable type	Set monitoring data type, support 1-bit, 8-bit, 16-bit, 32-bit integer type
1-bit	Group elements	When the monitor data type is 1 bit, the number of group elements can be set, and the number of group elements can be selected as follows: 8, 16, or 32.
	Group Switching Variables	The value of the monitored variable corresponds to the group ID of the variable.
	Group list	The number of group limits ranges from 1 to 1024.
	Variable list	Bind the monitored variable and set the description of the corresponding bit of the variable.
8-32 位	IO Watch switching index variables	When monitoring multiple variables, it is used to switch the display contents, and the value of the monitored variable corresponds to the index ID of the variable.
	Variable list	Binding of monitored variables
	Text list	Setting the description of the corresponding bit of the variable, supporting the export of CSV files, and then importing them after modifying the format.
Language	e independent	Not checked by default. Variable description changes with language switching
Directly i	nput/Use text library	Manually input variable description content or use text to display description content
Font Sett	ings	Setting the text description font
Import Description	Export Include Text on	Ticked by default, when ticked, import/export includes variable descriptions, when unchecked, import/export does not include text descriptions.
Title bar		Optional whether to display the title bar, the default check box; do not display the title bar, the column settings inside the description of the column is not displayed
Title bar	font settings	You can set the title bar font separately; you can also tick the box to make the font consistent with the description; after ticking the box, the title font setting button disappears, and the title bar font is consistent with the variable status description font.

8.7.7.2 Table property

Dif I/O[IO_0005]		×
 IO Watch Label Table property Graphics Display Set 	State picture display size: Width: 30 [±] Height: 30 [±] Show Line: Source line Row separator line Column separator line Border line type:	

1. When [Enable graphics] is checked in the [graphic] property page, the width and height of the graphic can be adjusted. The minimum value is 1, the maximum value does not exceed the list width. if it exceeds, it is displayed as maximum.

2. Set control table properties, line color, and background color. You can also switch between single/double page display modes

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8.7.7.3 Label

The label setting page is used to set the content in the "Status" column and supports the use of a text library.

Dif I/O[IO_0005]

IO Watch	☑ UseLabel			Label L	ist
Label	Text Edit				
Table property	Language Independent				
Graphics	Current Language: Chinese(Sim	plified Han) 🔹 🚱			
Display Set	🔘 Use Text Lib				
	 Direct input 			ID	Content
	Content			1 o	ff
		Save content to text lib		2 o	n
	off				
	Save Content To				
	All state	All language	All		
	1				
		Label set description			

Enable Labe	l after checking 【U	se Label
	Language	After checking, it does not change with language switching. It is not checked by default.
	independent	When unchecked, different languages can be selected for text input
Text Edit	Use Text Lib	Not checked by default, input directly using text. After checking, select the content of the text
		library to use
	Direct input	Directly input content
		All state: Synchronize the current text content to all states
a	Save Content To	All language: Synchronize the current text content to all languages
Content		All: Synchronize the current text content to all states and languages
	Save content to tex	tt lib: Save the currently set text to the text library for easy access when using it next time

8.7.7.4 Graphics

Dī I/O[IO_0005]			×
IO Watch Label Table property Graphics Display Set	Enable Graphics k_lamp_00.bg Project Graphics Lib: Critical Import Informa Tips button button		State: 0 Size(100x100) State Preview: State:0 State:1 State:2
	Import Graphics	Add Graphics]
	Batch Import Picture	Delete	Import Picture
	☐ Modify Fill		
Help ID:	5 🛨 Describe:		OK Cancel
	Description	n for using graphic settings	
Use Graphics: Chec	k [Enable graphics]		
Import Graphics	Import the required graphics from	n the system library	

rr	
Add Graphics	Add graphics outside of the system library
Batch Import	Batch import of external images, supporting image formats such as. jpg. jpeg. png. bmp
Picture	
Delete	Delete the currently selected drawing
Import Picture	Import a single external image, supporting image formats such as. jpg. jpeg. png. bmp

8.7.7.5 Display Set

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Fixed ratio of	Set the size of the component and calculate the corresponding width or height proportionally. The ratio
width and height	is the ratio of width to height before selecting [Fixed Ratio].
	Always display: Check to indicate that the current component remains displayed
	Condition display: Includes permission control, expression control, no communication when
	components are hidden, and false status takes effect
	① Authority control: Support multiple permissions control, check that the operator needs to meet the
	multiple permissions of the component to display the current component.
Display/Hide	② Express control: Check to indicate that the current component can only be displayed when the state
	of the specified bit or word variable meets the set conditions
	③ Do not communicate when hidden: When the variables used by components are External variable,
	check this option, and components will not communicate when they are hidden
	④ False state work: Takes effect when in an error state

8.8 File

8.8.1FIile List

8.8.2 File In/Out

8.8.3 FTP

Can be used to access FTP files from other screens or computers, supports offline simulated access

8.8.4 Browse File

File browsing can be directly selected in the switch function, and then the corresponding triggering method can be set

ampSet	No.	Action	Execution		Action	n Description	
and the second	140.	Action	Execution		Action	rbescription	
abel Grahics							
fouching Ena							
Display Set							
	Move Up	Move D	own	Сору	Paste	Delete	Clear
	Add Function:						
	Word	Bit	Wi	ndow Operation	Macro	Condition	Recipe
	Browse File	Data Ba	ase S	stem Function	User Permission	Alarm/Event/Log	
	Function execution	n mode:	Run All			🔘 In Order	Run
		cute the subseq	went function	s after function ex	ecution failure.		
	Send notificatio	on after function	execution fai	ure.			
		on after function	execution fai	ure.			
		on after function	execution fai	ure.			
		on after function	execution fai	ure.			
		on after function	execution fai	ure.			
		on after function	execution fai	ure.			
		on after function	execution fai	ure.			

As shown in the following figure, corresponding variables can be established to display folder path, file name, and full path. File suffixes can be added and removed according to requirements. If you want to view CSV files, add the suffix of the *.csv file. *. * indicates that all file types can be displayed by default. The browsing function facilitates users to search for imported

and exported files.

Action Set		
rigger Mode:	ButtonDown *	
Folder path:		
File name:		
Full path name:		
ile suffix list:		
ADD DEL	ETE	
V.		

8.8.5 Browse PDF File

Browse PDF File is used to display PDF documents in external storage devices, according to the screen model to support HMI, U disk, SD card documents, to facilitate the user to view PDF files; can be used with the FTP transfer function and document browsing to open the file.

DF[PDF_0001]			×
Base Property	Store device HMI Show mode Page Turnnin	Dynamic File path T.pdf	Dynamic
	 Show mode variable ① Scale variable Please note that variables and co Background color Transparent 	Current page variaTotal page variable	
Help ID:	1 Describe:		OK Cancel

	Browse PDF File - Base Property Description
	Read the corresponding device under the pdf file, note: the PDF document has a password
Store device	protection or permissions, does not support the browsing
	Dynamic storage device can be set, 1 for HMI; 2 for SD card; 3 for USB1; 4 for USB2
File path	Input the complete path of the file under the device, support the input of multi-level path (need to input the file name suffix, example: file / 1.pdf)

	Support dynamic full path, variable input the correct path to read and open the device under the file, the variable is a string type Note: Dynamic full path and display file name controls are mutually exclusive.		
Show mode	I:1 Image: Show actual size fit, width fit and height fit controls Support to check the display mode variable. Note: 0 means size fit; 1 means height fit; 2 means width fit;		
Page Turnning	Control (100) Control (100) Control (100) Display up/down page, current page number and total page number controls, support manual input of the current page number; Support checking current page and total pages variables, the current page and total pages are read automatically after the file is opened;		
Scale	 Scaling display of pdf files, range: 100%~300% Supports checking the scaling variable, range: 100~300; inputting a value beyond this range is invalid; 		
Show file name	Show the current open file name, click on the drop-down box to display other pdf files under the same level path;		
Background color	Set the background area color, support check transparent color		
5 PDF[PDF_0001]	X		
- Base Property Display Set	Location Size Lock X 7 Y 11 Fixed Ratio Width 1256 Height 583 Image: Size Display/Hide One communicate when hidden One communicate when hidden Image: Size Image: Size		

	Browse PDF File - Display Set Description
Lock	Set whether the position of the component is locked
Fixed ratio of width and height	Set the size of the component and calculate the corresponding width or height proportionally. The ratio is the ratio of width to height before selecting [Fixed Ratio]].
Display/Hide	 Always display: Check to indicate that the current component remains displayed Condition display: Includes permission control, expression control, no communication when components are hidden, and false status takes effect ① Authority control: Support multiple permissions control, check that the operator needs to meet the multiple permissions of the component to display the current component. ② Express control: Check to indicate that the current component can only be displayed when the state of the specified bit or word variable meets the set conditions ③ Do not communicate when hidden: When the variables used by components are External variable, check this option, and components will not communicate when they are hidden ④ False state work: Takes effect when in an error state

8.9 Other

8.9.1Time

The time component is used to display the date, week, and time of the touch screen/controller.



Check at least one of the three options: display date, display week, and display time.
 You can only check the week when selecting [system time].

1. In the Basic Property dialog box of the Time component, corresponding properties can be set.

Grahics	T Division Date	1000		a la seconda de la compañía de la co
Touching Ena	Display Date	YY*MM*DD		Font Property Import Font Template Save to Font Lib
Display Set		V Year 4 Digi		import ront template Save to ront Lib
			ress for Month and Da	Family:] 潜惠体 2.0 55 Regular * Color *
		Sunday	Sunday	By Size: 16 B I U Char spac 0 Char spac 0 Multi-line alignment: III IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
		-		Shadow
		Monday	Monday	巴普惠体 2.0 55 R Color - 🗹
		Tuesday	Tuesday	Offset: X: 4 0 Y: 4 0
	🔄 Display Week	Wednesday	Wednesday	
		Thursday	Thursday	
		Friday	Friday	-
		Contrastore	C to be used out a	*
	😢 Display Time	HH:MM:SS		•
		E 12-hour Sy	stem(AM/PM)	
	Date/Time Bra	nch DisPlay		
	Display Date in t			
	e.g.: August 8, 20		00	
	2008-08-08 20:0	00:00		

	Time - Basic Property Description	
Operator Property	It includes two options: [system time] and [variable time]. Selecting system time displays the	
	system time, and selecting variable time selects the variable for time	
Display Date	Set whether to display dates	
Show Week	1. [Date Format] : Five formats are available. Where DD represents the day, MM represents the	
	month, and YY represents the year	
Display time	Set whether to display time	
	1. [Time Format] : Three formats are available. Where HH represents hour, MM represents	
	minute, and SS represents second	
	2. [12-hour system (AM/PM)] : The selected time is displayed in 12 hour format. If the time is	
	8pm and the time format is "HH: MM: SS", then "08:00:00 PM" will be displayed; If this box is not	
	selected, it will display as' 20:00:00 '	
Date/Time Branch	Set whether the date and time are displayed separately, including [Display Date in the First	
Display	Line] and [Display Time in the First Line]	
Text Edit	Used to edit the text content of the week, valid when [Display Week] is checked	
Font Property	Used to set the relevant properties of the font of the time component. For specific attribute	
	descriptions of font templates, please refer to Chapter 19.2 Font Library.	

2. In the "Graphics" dialog box of the "Time" component, corresponding attributes can be set.

	Enable Graphics		
ouching Ena	k_frame_00.vg		State: 0 * Size(100x100)
isplay Set	Project Graphics Lib:		State Preview:
	key101 button button	k_butto k_frame, k_lamp	State:0
	Import Graphics	Add Graphics	Original size
	Batch Import Picture	Delete	Import Picture
	Shadow Effect		

	Time - Graphics Description
Enable	Set whether the time component uses graphics. If there are no required graphics, click [Import
Enable Graphics	Graphics] to import external images. Please refer to Chapter 19.2 Font Library for specific attribute
Graphies	descriptions of the images.
Shadow	Effective after checking. Set component shadows and offset values
Effect	
Modify Fill	You can choose three fill types: color, pattern, and gradient to set the background color

3. In the "Touching Enable Setting" dialog box of the "Time" component, corresponding properties can be set.

Base Property	Touching Enabled Setting	Security Setting
Grahics	Always Valid	P OperConfirm wait(100ms) 30
	AlwaysInvalid	MinPushInterval(100ms) 0
Display Set	Conditional Enabline	RecordOper
		Language Independent
		Current Language Chinese(Simplified 🔹 🗊
		 Direct input
		All language Text lib Record data change Variable
		Notify
		Notity write success
		Triger/Touch

 [Always valid] : If checked, it means that the data can be effectively written to the spregister by touching the active area of the current component [Always Invalid] : If checked, it means that even if the current component touches the value of the current component touches the current component to the current compone	
register by touching the active area of the current component2. 【Always Invalid】: If checked, it means that even if the current component touches the value	pecified
2. [Always Invalid] : If checked, it means that even if the current component touches the va	
	lid area,
the data cannot be effectively written to the specified register	,
3. [Show Invalid Flag]: If checked, it indicates that the current component is in a touch	ı invalid
state, and the component displays an invalid flag. This function is only available when	
Invalid] or [Conditional Enabling] is checked. The color of the invalid touch mark can be s	-
[Global Set] . For specific attribute descriptions of global settings, please refer to Chapter 3.2	
Touching Set.	2 Olobal
Enable Setting 4. [Display grayscale font]: If checked, it indicates that the grayscale font will be displayed	ed when
the current component is in a touch disabled state. This function is only available when 'Always	
or 'Conditional Enabling' is checked.	IIIvanu
5. [Condition Enable]: Check to indicate that the current component can only be touched a	and data
written to the specified register when the state of the positioning variable or word variable meets conditions	s the set
6. [Automatic Display of Login Window]: If checked, it means that when the current user's perr	nissions
do not meet the set permissions, a user login window provided by the system will automatically	/ pop up
for the user to enter their password for login. Please refer to Chapter 6 for specific attribute desc	riptions
of the user login window	
1. [Minimum Push Time (100ms)] : It is necessary to continuously press the current compo	
no less than the set time before the data can be effectively written to the specified regist	ter. The
minimum unit is 100ms. A value of 0 indicates that the minimum pressing time is not set2. [Operator confirmation wait (100ms)] : If checked, the HMI will automatically pop	
2. [Operator confirmation wait (100ms)] : If checked, the HMI will automatically pop Security operation confirmation window when touching the current component. Click "OK" to write the	
Setting the specified register. Click "Cancel" or if the user has not clicked "OK" after the set waiting the	
operation will be automatically cancelled	inic, the
3. [Minimum Push interval (100ms)] : The minimum pressing time interval between two op	erations
of the same component, with a minimum unit of 100ms. When it is 0, it indicates that the m	
pressing interval for the operation is not set	
To use [Record Operation], you need to first enable the operation log. For specific descrip	otions of
the operation log, please refer to Chapter17 – Operation log	
1. [Language Independent] : If [Language Independent] is checked, the selection box after	'Display
Language" will be invalid, and the component defaults to using the first language.	
Record 2. [Current Language] : The currently displayed language	
Operation 3. [Use Text Lib] : If checked, the operation record of the current component will use the text	content
of the text library	
4. [Direct Input] : If checked, the text content of the input box will be used for the operation re-	ecord of
the current component	
5. 【Record Data Change】: If checked, the operation log can monitor the changes in data or the	he status
of variables.	
1. [Notify before write] : If checked, the operation must be notified of completion before th	ne actual
Notify action can be triggered	
2. [Notify write success] : If checked, the notification will only be triggered if all actual act	ions are
successfully executed	
1. [Keyboard] : By setting the keyboard buttons, it takes effect when the touch setting b	outton is
Trigger/Touch pressed	
2. [Register]: Set bit variables and trigger types to achieve touch operation	

I

4. In the 【Display Set】 dialog box of the Time component, corresponding attributes can be set.

Base Property	Location			Size	
Grahics	💽 Lock 🛛 X 1	0 Y 1	÷	Fixed Ratio Width 100	Height 30
Fouching Ena	Translucent				
Display Set	transparency	50	-		
	Display/Hide				
	Always Display				
	Condition Displ	ay 🛄 Do not con	municate	when hidden	

Time - Display Set Description					
Lock	Set whether the position of the component is locked				
Fixed ratio of width and height	Set the size of the component and calculate the corresponding width or height proportionally. The ratio is the ratio of width to height before selecting [Fixed Ratio].				
Translucent	Effective after checking. The component will display the transparency level based on the translucency value				
Display/Hide	 Always display: Check to indicate that the current component remains displayed Condition display: Includes permission control, expression control, no communication when components are hidden, and false status takes effect ① Authority control: Support multiple permissions control, check that the operator needs to meet the multiple permissions of the component to display the current component. ② Express control: Check to indicate that the current component can only be displayed when the state of the specified bit or word variable meets the set conditions ③ Do not communicate when hidden: When the variables used by components are External variable, check this option, and components will not communicate when they are hidden ④ False state work: Takes effect when in an error state 				

8.9.2 Window

The Window element allows you to choose between direct or indirect windows, and can display other windows within a specific area of the current window;

8.9.2.1 Directwin

	W/in:MD111				X	
ចាំ [DWnd_0001:[Direc	twin:iviB1]]				X	
Base Property						
Display Set	_	Specified Window				
	DirectWin 👻	B 2:Basic Window(2)			•	
	Trigger Setting	Trigger Variable				
	Open 🔹	MB1				
	Show title bar					
	Title			🗹 Clo	ose button	
	Window Title					
Help ID:	1 Descr	ribe:		ОК	Cancel	
	Direc	t Window - Basic Property	Description			
Setting	Choice of direct or indi					
Specified Window		low to be displayed in the sic window in the project	direct window area, and t	the drop-dov	wn box can be	
Trigger Setting	Split into on and off, de	efault is on				
Trigger Variable		or selected; supports bit v				
Show title bar	 Display the title bar and close button of the window component, and the title bar can by yourself. Drag the title bar to move the component position. Close the window with the close button without affecting the state of the variable. 					

8.9.2.2 InDirectwin

■ [InDWnd_0001:[InDi	rectWin:Variable]]	×		
Base Property				
Display Set	Setting Dynamic Window			
	InDirectWin Variable V+			
	Show title bar			
	Title Close button			
	Window Title			
Help ID:	1 Cancel OK Cancel			
	Indirect Window - Basic Property Description			
Setting	Choice of direct or indirect window	_		
Dynamic Window	Selected variables can set the corresponding pop-up window, can add or select variables; suppor word variables (8-64 bits)	rt		
	1. Display the title bar and close button of the window component, and the title bar can be set by	y		
Show title bar yourself.				

Drag the title bar to move the component position Close the window with the close button without affecting the state of the variable.

8.9.2.3 Display Set

Display Setting Description						
Lock	Sets whether the position of the component is locked or not					
Fixed Ratio	Set the size of the component to calculate the corresponding width or height proportionally. Proportion is the ratio of width and height before [Fixed Ratio] is ticked.					

8.9.3 QR code

The QR code component displays characters in the form of a QR code, and users can view the corresponding characters by scanning the QR code.



The QR code component displays the generated characters in the form of a QR code, and users can scan the QR code to view the corresponding characters

8.9.3.1 Base Property

Base Property Display Set	Data	
	Read 🚯	
	(NET0:设备1)4X1_0	()
	Action	
	Error Correct Level	
	H (30%)	•
	Appearance	
	QR code color	
		- 💌

	QR code-Base Property Description
Data	Used to select variables associated with QR codes, with a maximum length support of 512 bytes
Action	By default, it is the highest and divided into L (low: 7%) M (medium: 15%) Q (high: 25%) H (high: 30%). The error correction level gradually increases from L to H, and the fault tolerance level gradually increases
Appearance	Set the color for displaying QR codes

8.9.3.2 Display Set

CRCode(QR_0009)											×
Base Property	Location					Size					
Display Set	Lock	х	652	0 Y	26	Fixed Ratio	Width	103	Height	103	0
	Display/Hide										
	Always Display	Condition	Display	Do not comr	nunicate wh	n hidden					
Help ID: 9	÷ Des	cribe:							O	(Cancel

	QR code-Display Set Description
Location	Set whether the position of the component is locked
Size	There is no fixed aspect ratio, any value of width/height is modified, and the other value is modified synchronously; Dragging components on the screen proportionally zooms in and out
	Check to indicate that the current component remains displayed continuously
Display/Hide	 Condition display: includes permission control, expression control, no communication when components are hidden, and false status takes effect ① Permission Control: Checking indicates that the operator needs to have the set permissions in order to display the current component ② Expression control: Check to indicate that the current component can only be displayed when the state
	 of the positioning variable or word variable meets the set conditions ③ No communication when component is hidden: When the variable used by the component is an external variable, check this option to prevent communication when the component is hidden ④ False state takes effect: takes effect when in an error state



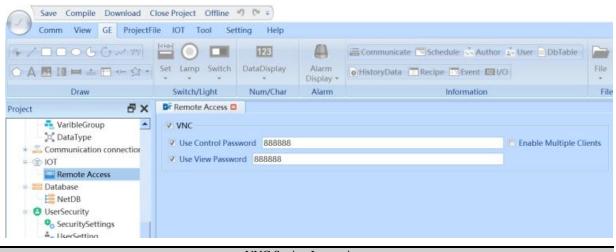
9.1 VNC

VNC is an abbreviation for Virtual Network Computer, which is a screen sharing and remote operation software that uses the RFB protocol. This software can transmit keyboard and mouse movements and real-time screen images through the network.

The VNC system consists of a client, a server, and a protocol. The server's purpose is to share the screen of the machine it is running on. The server passively allows the client to control it, while the VNC client (or Viewer) observes and controls the server, interacting with it.

VNC is independent of the operating system, so it can be used across platforms. Kinco enables the VNC function by using the touch screen as a server, which can be remotely accessed by remote devices (such as PCs, mobile phones, etc.) to obtain images or data.

Note: F1 series screens do not currently support this feature.



VNC Setting Instructions

Check VNC to enable VNC function (support client and web function):

1. Client port number is 5900 by default

2. Browser port number is 5800 by default (just enter: screen IP:5800 at the browser web address)

Use Control Password	Can operate and view HMI
Use View Password	Can monitor HMI but cannot operate it
Enable Multiple Clients	Using multiple client connections simultaneously. Attention: Too many clients can affect the
	operation of HMI

As shown in the following figure, you can use VNC client to bind the IP address of the screen during operation. Enter the password to achieve screen monitoring and operation.

V VNC Viewer Eile ⊻iew Help		- 🗆 X
/ 192.168.0.100		Sign in ▼
	₩ 192.168.0.100 - VNC Viewer – □ ×	
	Authentication × Enter the credentials expected by VNC Server running on the remote computer. Note these are not your RealVNC account credentials.	
٤	VNC Server: 192.168.0.100::5900 Username:	
<u></u>	Password: •••••	
-	Remember password OK Cancel	
it 切 专	Alterr Stop	ly.

9.2 Independent Desktop

The independent desktop is different from VNC. It supports mobile phone and tablet client APP to connect with the screen. It can operate the interface independently and independently from the screen operation. It is asynchronous. It can be understood that the mobile phone or tablet is regarded as an independent touch screen device. After setting the number of connections and connection password, download DTPView.apk and install it

Project	Β×	Di Remote Access 🔀
COM2 :Not Used Therefore the therefore the the the the the the the the the th		Use View Password 888888
- ♀ IOT - ♀ IOT - ► Remote Access - ▲ MQTT 		✓ Independent Desktop Maximum Online Number 3 2 Quantity: 1-7 ✓ Use Connection Password 888888 Note: Excessive numbers may affect performance speed

When installing an APP, please make sure to enable the background running permission of the APP and turn off the power saving mode. If it is a Redmi tablet, it is best to turn off the power saving strategy.

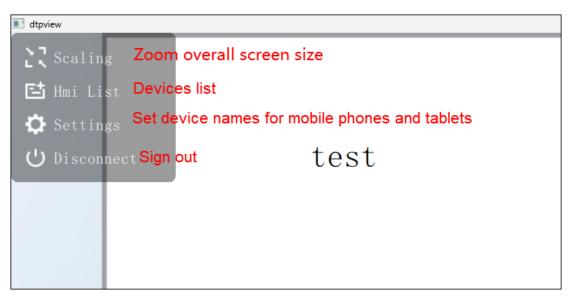


Enter the IP address and online password on the screen

– 0 ×
Connection
+ New Connection
192. 168. 210. 155
888888
✓ Save Password
Cancel Confirm

Click on the floating ball in the upper left corner to perform the following operations

dtpview	
0	
	test



Attention: After zooming in and out, the screen cannot be touched. You need to click on the hover ball again to restore touch **9.3 MOTT**

MQTT (Message Queuing Telemetry Transport) is a lightweight message protocol based on the publish/subscribe paradigm. It is suitable for remote devices with low hardware performance and environments with poor network conditions. Therefore, MQTT protocol has a wide range of applications in IoT (Internet of Things), small device applications, mobile applications, and other fields. Advantages: Low code volume, low overhead, low bandwidth usage, instant messaging protocol

📴 MQTT 🔀								
MQTT List + 💼								
MQTT_1asssd-192.168.100.102-18	MQTT_1asssd	MQTT_1asssd						
	Client ID 🔒							
	%2			Random code	Ŧ			
	 User authenti 	cation						
	User name			Password				
	admin	admin						
	Theme Publis	Theme Publishing						
	Index	Alias	-	Theme				
	1	Topics1	test_topic1/MB0					
	2	Topics2	test_topic1/<10		*			
	New	Delete						

DT Edit MQTT	×
MQTT_1asssd	
Standard MQTT *	MQTT V3.1
IP Address	Port
192 · 168 · 100 · 102	1883
Client ID 🚯	
%2	Random code 🔹
✓ User authentication	
User name	Password
admin	••••••
▼ Extension Settings	
Time stamp Server heartbeat	cycle (s)
HMI time ~ 60	*
▼ Server state	
Server state 1	
Error notification 🚯	

🐨 MQTT Theme Property	×
Topics1	
Theme 🚯	
test_topic1/MB0	
▼ Send Mode	
Current Mode	
Trigger alarm	
8:ON-OFF	Ψ.
▼ Transfer settings	
QOS	
2 *	
▼ Content Format	
Data format	
JSON 🔹 Contain time stamp 🔽 Message format use character "d"	

	MQTT 设置说明				
description	Description of the server, modifiable				
Standard MQTT	Select the corresponding MQTT protocol version				
IP Address	IP address of the server				
Port	default1883				
User authentication	Consistent with the username and password settings of the server				
Extension Settings	Timestamp: optional HMI local time, UTC time				
	Server heartbeat : Conduct connection state access to the server according to the set cycle				
Server Status	= 0, stop connecting to the MQTT server , = 1 , the MQTT server was disconnected, = 2 , the MQTT server is online				
Error notification	0: NoError, 1: InvalidProtocolVersion , 2: IdRejected, 3: ServerUnavailable, 4: BadUsernameOrPassword, 5: ProtocolViolation, 6: UnknownError, 7: Mqtt5SpecificError				
Theme Publishing	The topic description can be modified arbitrarily, defaulting to topic1,2,3				
	Send mode: Send a message to the server when the selected alarm is triggered				
	Transfer settings: Set the QoS level to at most once (QoS 0), at least once (QoS 1), and only once				
	(QoS 2)				
	Data format: default Jason format, can be checked to include timestamp, messages use d symbol, and				
	messages are sent with timestamp and d symbol				

9.4 FTP

FTP (File Transfer Protocol) is one of the protocols in the TCP/IP protocol group. The FTP protocol consists of two components, one is the FTP server, and the other is the FTP client. The FTP server is used to store files, and users can use the FTP client to access resources located on the FTP server through the FTP protocol. The following describes the settings for accessing other servers using the touch screen as an FTP client

FTP Server Setting Instructions				
The description can be edited arbitrarily, the port number defaults to 21				
IP Address	Consistent with the IP of the server, check to modify the IP by using the value of a dynamically settable string variable			
Using anonymity	For servers with anonymous access, you can check this option for anonymous access			
User Name	Consistent with the username set by the server, check to modify the username by using the value of a dynamically settable string variable			
Password	Consistent with the password set by the server, check the option to modify the password using the value of a dynamically settable string variable			

Example of scenario application:

As shown in the figure, edit the IP, port number, username, and password to match the server settings

DataType	FTP List 🕂 💼	Server Setting	
🖹 🚊 Communication connectic			
🖃 📟 CO M	1: Ftp_1 192.168.210.45		
🚥 COM0 :Not Used		Ftp_1	
COM2 :Not Used		IP Address Dynamic Port	Dynamic
E 🧰 Ethernet		192 . 168 . 210 . 45 21	÷
E 💼 NETO			*
⊡ Modbus IP:1		Using anonymity	
设备2:192.168.2		User name	Dynamic
		User hanne	Dynamic
E 😽 USB		admin	
🖏 USB1:Not Used			
E 😤 IOT		Password	Dynamic
🔛 Remote Access			Ø
- MQTT			
FTP			
PTP FIP			

If you want to access multiple servers, you can create a new one in the FTP list

	FTP列表 🕇 💼	服务器设置	
	1: Ftp 1 192.168.210.45		
🖃 🚓 USB	2: Ftp 2 192.168.210.11		
😪 😽 USB1:	2.11p_2 152.100.210.11	· · · · · ·	
🖃 奎 物联网		IP地址 使用动态 端口号	使用动态
🔛 远程访问		192 . 168 . 210 . 111 21	
📥 MQTT		192 · 168 · 210 · 111 21	Ψ.
📅 FTP		使用匿名	
□ 〓 数据库		用户名	使用动态
🧧 网络数据库		用广石	JCH14/Jiek
□ 🖰 用户安全		user	
● 安全设置			
▲。 用户设置		密码	使用动态
📑 任务排程		•••••	œ
全局控制			

You can also switch servers for access through dynamic IP/username/password, all of which have string variables

DataType	FTP List 🕂 💼	Server Setting		
CO M	1: Ftp_1 dynamic_ip	Ftp_1		
COM0 :Not Used				
COM2 :Not Used		IP Address	Dynamic Port	Dynamic
🖻 🧰 Ethernet		dynamic ip	+ 21	Å
🖃 🧰 NETO		-)		*
⊡ Modbus IP:1		Using anonymity		
设备2:192.168.2		User name		Dynamic
		Oser hame		Dynamic
⊟ •⇔ USB		user_name		+
🖏 USB1:Not Used		Deserved		✓ Dynamic
🖃 全 IOT		Password		Uynamic Dynamic
Remote Access		password		+
- MQTT				
FTP FTP				

When switching server access, after modifying these three variables, trigger the FTP transfer action to access the new server

Switch[BL_0001]				
SwitchFunction				
LampSet	No.	Action	Execution	Action Description
Graphics	1	Butto nDown	FTP Action	Download;FTP Server: Ftp_1 dynamic_ip
Touching Enabled Setting				
Display Set				

Please refer to "8.3.13 FTP Action Set" for detailed instructions on FTP action upload/download settings

10 Database

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The database is mainly used to control data reports and set the function of saving and then exporting them

10.1 Net Database

			Des	cription for Data	base Table		
	Database	Name		Set the name of	of the data report to a maximum of 128 characters		
Table List		Descripti	Description		Description of table attributes, up to 128 characters		
	+ 💼	+ 🛅 💌 🔺		Adding, deleting, moving up and down fields			
		Name	-	Set the field	Set the field name of the database table to a maximum of 128		
		Inallie			characters		
		Descripti	on	-	field attributes, up to 128 characters		
			Null	Do not set fiel			
		Allow Blank					
			Major Key		fy each record, the data in the primary key field cannot		
		Propert		be empty			
D. I		у		<u>^</u>	to increment the data of a certain field as the record is		
Datab	Field list		Major Key:	inserted (without inserting data for this field). The prerequisite for			
ase		Auto	automatic increment is that this field must be a major key, and there				
table			Increment	can only be one automatic increment in a table. Only 8 bits, 16 bits			
list					ts have this feature		
		Char Len	igth		I type is string, the length of the string field can be set		
				SQLite 、	Supports all data types.		
				MySQL			
		Туре		PostgreSQL	64-bit unsigned numbers are not supported.		
					Unsupported 32-bit unsigned numbers, 64 bit		
				SQL Server	signed/unsigned numbers, time, long time, time of day		
					and date		
		Record fi	Record filled operator		Automatically delete the oldest record		
	Capacity			No longer sav	ing records		
	set	Capacity	Capacity unit		Number of records		
		Entries ca	apacity	The default capacity is 1000 units, with a maximum of 65535 units			
		Local Da	tabase	Database on t	he local machine. Currently only SQLite, PostgreSQL		
				are supported			
				Note: PostgreSQL is not support G2 series HMI			
Property	Property Remote Database		Database	Set database types: MySQL, SQL Server, PostgreSQL			
		Set the IP add	ress, port (MySQL default port 3306, SQL Server default				
		port 1433, Pc	stgreSQL default port 5432), username and password,				
			and then update	te the database			
Databas	e use	Selectar	latabase table to	view the usage a	nvironment of the database table		
environ	ment	Scient a l		view the usage e	invironment of the database table		



1. These three actions represent replication, addition, and deletion, respectively. Copy can be copied from both local and remote databases.

Must be checked to delete database tables/fields
 Collaborate with "Database Action Settings" in <u>Chapter 8.3.1.11 – Database Action Set</u> and <u>Chapter 8.7.3 – Database Table</u>.

11 User Security

User security function refers to the ability to define specific authorization and access permissions for specific users. Anyone who wants to use HMI functions needs to log in with a specified username and user password.

User permissions involve two types of objects: user groups and users.

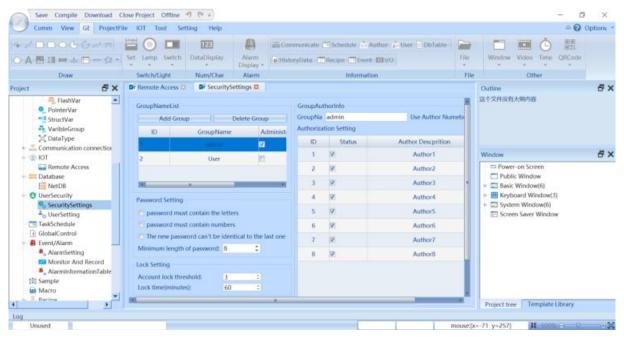
User group: Set a certain type of user group to have specific permissions, and a user group can contain multiple users.

User: Belongs to a specific user group. A user can only be assigned to one user group.

In practical applications, access permissions are not directly assigned to users, but rather to specific user groups. A specific user is assigned to a specific user group to obtain permissions, which separates the management of a specific user from the configuration of permissions and facilitates management. Information about user groups and users is stored in the HMI's internal database.

11.1 Security Settings

The security settings are preconfigured in the Project Menu Window. Clicking the "Security Settings" option in "User Security" in the "Project" window will automatically open the User Group Management Settings page in the design area. This page is used to configure and manage user groups and users. The configuration page mainly contains the "User" tab setting page and "Group" tab setting page. By clicking the button of the "Security Settings" tab, you can open the "Properties" parameter configuration dialog box.



11.1.1 Group Name List

Add (Broup Dele	te Group
ID	GroupName	Administ
		2
2	User	1

Group Name List Description				
Open the "Group" tab in the User Rights Management Editor and click the "Add" button to create a new permission				
group and configure it. By default, two types of user groups, "admin" and "User", have been pre-defined in the system.				
Add Group	Add permission groups, up to 32 permission groups can be added			
Delete Group	Delete permission groups			
Permission	ID	Permission Group Number		
settings	Group Name	Customizable user group name		
settings	Administrator	Set a unique administrator permission group. Effective after checking		

11.1.2 Password Setting

Password Setting		
📃 password must contain the l	etters	
📃 password must contain num	bers	
📃 The new password can't be i	dentical to th	e last one
Minimum length of password:	8 🗘	

Password Setting Description			
Password must contain the The user password set must contain letters			
letters			
Password must contain	The user password set must contain numbers		
numbers			
The new password can't be	The new password for modifying password settings cannot be the same as the old		
identical the last time	password		
Minimum length of password	Set the minimum character length of the password. The default length is 8, and up to 1		
	digits can be set		

11.1.3 Lock Setting

Lock Setting		
Account lock threshold:	3	
Lock time(minutes):	60	\$

Lock Setting Description			
Account Lock	The number of times you are allowed to enter the wrong password for the same account. After		
Threshold the set number of times, the account will be locked and cannot be used.			
Locking time	Set the time when the account will be locked. The account will be unlocked when the set time		
(minutes) is reached. The time is in minutes.			
The default account lock threshold is 3 and the default lockout time is 60, which means that after 3 incorrect passwords			

The default account lock threshold is 3 and the default lockout time is 60, which means that after 3 incorrect passwords are entered, the account will be locked out for 60 minutes.

11.1.4 Swiping Setting

- Support swipe card to logon
- Usb port swipe card automatic login
- Cannot be Deleted Configuration Admin User

Swiping Setting description			
Support swipe card to login	After checking, you can set the user's card number and support entering the		
	card number to log in. It is not checked by default		
USB port swipe automatic login	After checking, you can use an RFID reader to swipe your card and log in		
	directly. It is not checked by default		
Cannot be Deleted Configuration Admin	Check to restrict the deletion of initial administrator users through user		
User management. It is not checked by default			

Note: Only after checking 'Support swipe card to login' can the USB port card swiping automatic login be checked. To use the card swiping function, you need to set the card number in the user settings, where one card number corresponds to one user. Using an RFID card reader for card swiping login is valid at any screen and time.

11.1.5 Group Authority Setting

	admin	Use Author Numebr: 8	
horiza	tion Setting		
ID	Status	Author Descprition	
1		Author1	
2		Author2	
3		Author3	
4		Author4	
5		Author5	
6		Author6	
7		Author7	
8	7	Author8	

Group author setting description				
Group Name	Edit the name of the permission group			
Use Author Number	Set the number of permissions for the current permission group. Maximum quantity is 32			
	ID	Permission number		
Authorization Setting	Status	Set the permissions that the permission group has. Effective after checking. It is not checked by default		
Setting	Author Description	Customizable permission descriptions, such as "operator" and "engineer".		

11.2 User Setting

Open the "Users" tab in the User Rights Management Editor. You can modify the number of users, create new users, and configure them. By default, "User1" and "User2" users have been predefined in the system.

11.2.1 User Name List

UserNameList	
UserNumber: 2	0
UserName	GroupN
Liser i	admin
User2	User

Parameter	Description				
UserNumber	User serial number				
Enable	If checked, the user becomes effective. It is not checked by default				
User name	Customizable User Name				
Group Name	Set the permission group to which the user belongs and get the corresponding permission				
Hide User	Check to hide the user in the user list. It is not checked by default				
User Info	Set user information, such as engineers and operators. The system variable '\$User Description'				
User Info	can be used to display the current user information				
Import Users	Import a user data table with a default file name of "User List. xlsx" and a type of xlsx; The pop-				
	up window is named "Import User" (the file name can also be imported without the input suffix.				
	xlsx)				
Export Users	Export the current project user data table, and the exported file name defaults to "UserList",				
	which can also be named by oneself. The file type is xlsx. The exported file exists in the software				
	installation directory				
	These two actions represent import users and export users, respectively.				

User Number: Set the total number of users, with a maximum of 1024

11.2.2 User Authority Information

Set initial sta UserName: Password:	User1 888888888	Password validity period Setting(Unit:day) allow change password at runging prohibit change password
LogoutTime(mir GroupName:	nutes): 10 : (0 indica admin	te never logout) prohibit change pwd. in named date
UserInfo: GroupAuthor:		
ID	AuthorDesc	
1	Author1	
2	Author2	
3	Author3	
4	Author4	
5	Author5	
6	Author6	
7	Author7	
8	Author8	

Setting items	Description		
User Name	Customizable User Name		
Password	Configure the user password for the corresponding username in string format		
Group name	Set the permission group to which the user belongs and obtain the corresponding permissions		
	for the permission group		
Logout time (minutes)	Set the automatic logout time to start counting from the last operation after logging in to the		
	user. 0 indicates that the identity has not been unregistered		
CardID	After enabling card swiping login, the user card number can be bound. The system variable		
	'\$Employee Card Number' can be used to display the current user information		

Group Author	Display the permission content of the permission group set by the user		
Allow change password at	The user password can be modified by configuring the function on the HMI, which is		
running	checked by default		
Prohibit change password	Prohibit modifying user passwords by configuring functions on HMI		
Prohibit change pwd in	Set the number of days to not allow modification. The default is unchecked, and the default		
named date	value is 1. The setting range is 1-3650 and the unit is "days".		
Prompt change pwd	The user is automatically prompted to change the password after the specified number of		
beyond named date	days. The default is unchecked, and the default value is 1. The setting range is 1-3650, and		
	the unit is "days".		

11.3 User Variable

If users do not use the system's own user window, they can create their own user-related operations through user variables.

Variable Name	Data Type	Data Length (bit/byte)	Read/Write	Description
\$User_Name	String	31	Read only	Used to display the current username. It is blank
	~8			when not logged in
\$User_Password	String	15	Read/Write	Enter user password when logging in
\$User_Group			Read only	Used to display the user group to which the
	String	31		current user belongs. It is blank when not logged
				in
\$User_Description	Stain a	31	Read only	Used to display the description information of the
	String	51		current logged in user
\$Employee_card_ID	Stain a	31	Read only	Used to display the user card number of the
	String	51		current logged in user
\$User_edit_status	Bit	1	Read/Write	User editing status enable
\$Logout_Time	16-bit	2	Read only	Used to display the current user's logout time,
	unsigned	2		which is 0 when not logged in
\$Employee_Card_Lo			Read only	Used to display whether the user supports card
gin	Bit	1		swiping login. 1 indicates support, 0 indicates no
				support

11.3.1 Current User Variable

11.3.2 Set Relevant User Variable

Variable Name	Data Type	Data Length (bit/byte)	Read/Write	Description
\$Set_User_Password	String	15	Read/Write	Used to enter a password when adding a new user or modifying a password
\$Set_Employee_Card _ID	String	31	Read/Write	Used to input card numbers when adding new users or modifying card numbers
\$Set_User_Descriptio	String	31	Read/Write	Used to enter a description when adding a new user or modifying a user description
\$Set_Password_Reten tion	16-bit unsigned	2	Read/Write	Used to set the maximum number of days a password can be used. After exceeding the set number of days, the user will be prompted to modify the password without forcing it to be modified. When the variable is 0, there will be no prompt
\$Set_Modify_Passwor d_Status	Bit	1	Read/Write	Set whether password modification is allowed. 1 indicates allowed, 0 indicates not allowed
\$Set_Confirm_Passw ord	String	15	Read/Write	Used to enter a confirmation password when adding a new user or modifying a password

\$Set_User_Account_S tatus	Bit	1	Read/Write	Used to set user account status when creating new users or modifying user parameters. 1 indicates disable, 0 indicates enable. The current user account status cannot be modified
\$Set_Logout_Time	16-bit unsigned	2	Read/Write	Used to set the logout time when adding new users or modifying user parameters
\$Set_User_Group_ID	String	31	31 Read/Write Used to set user groups when adding users or modifying user parameters	
\$Set_User_Name	16-bit unsigned	2	Read/Write	Used to set the username when adding new users or modifying user parameters
\$ Set_Password_Rete ntion_Date	16-bit unsigned	2	Read/Write	Used to set password retention days when adding new users or modifying user parameters

11.4 User Window

11.4.1 User Authority Browse

This screen is used to display user information. Administrator users can add, delete, modify, and restore default user properties for project configurations.

New L	Jser Delete U	ser Modify User Properties	Restore Defa	ult User
No.	User name	Permission group	User State	nform
##	##	##	##	##
		ig in with administrator privil		

11.4.2 User Property Configuration

Property configuration window for 'Add User'/'Modify User'

User:	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA					
Password	ААААААААААААААА	Confirm Password:	ААААААААААААААА			
User		AAAAAAAAAA	АААААА			
informatio User Grou State:	Rights Groups	Logout Time:	88888			
Password ON:Passwor Status:	d modification is pr	ohibited				
Password m	nodification is prohib	ited for a spe	88888 Imber of days:			
Prompt for	password modificatio	on after the s	88888 number of days			
Card ID:	АААААААААААААА	ааааааааа	ААААА			
	Cancel	0	K			

11.4.3 User Password Modification

Users can perform password modification operations through this screen

User Name	مممممممممممممممم	аааааааааа
Password	ААААААААААААА	
New Password	АААААААААААА	
Confirm Password:	ААААААААААААА	
	Cancel	ĸ

11.4.4 User Authority Login

You can log in by entering a username and password. When checking "swipe card login" in the security settings, you can also log in directly by entering the card number.

User Select: Us		Card ID	ААААААААААААААААААА
AAAAAAAAA Password:		АААААА	АААААА
АААААААААА	AAAA		
	Cancel		ОК

11.5 User Operation

11.5.1 Introduction to Operation

Except for login/logout, all other operations require the operation permissions of the administrator account. All operations are executed based on the bound system variables and their contents.

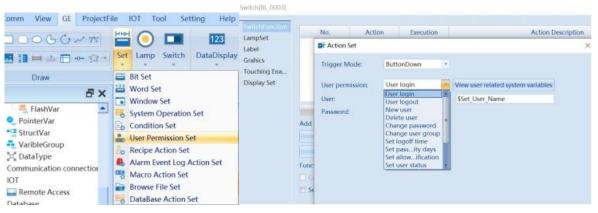
Operation Name	Operation Name
User login	Perform user login operations
User logout	Perform the operation of logging off the current user
New User	Execute the action of adding a new user
Delete User	Delete specified user
New Password	Modify the specified user password
User Group	Modify the user group of the specified user
Logout time	Set the specified user logout time
Set password validity days	Set the number of valid days for the specified user password
Set whether password modification is allowed	Set whether specified users are allowed to modify passwords
Set User Status	Set whether the specified user is enabled
Set all user parameters	Set specified user parameters
Restore project default user	Restore default user attributes for project configuration

Modify User Card ID	Modify the specified user card number
Modify User Description	Modify the specified user description information
Information	

11.5.2 Introduction to Function

The following functions all support performing user actions

1.Set Function



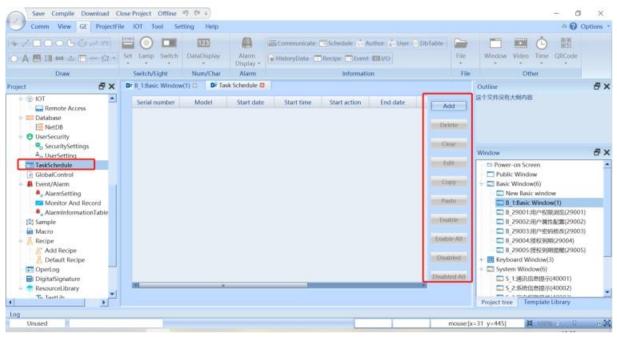
2. Window Control

of Modify Windo	w	_				? ×		
Base Property	Back Border	Window Control			_	-		
Order Num	Window State	e Trigger Set	Execute Set Exe	cute Act Enable	Set	L Add	File	Wind
DFC	ontrol Guide					- ×	File	
Tr	iggerSet A	ctionSet 9 Enat	bleSet				000-	Outline
	No.	Execution		Action Description	(= B 1:
		Dr Condition Ac	tion Set			×		
								Window
	Move Up							C P
Ad	d Function:		Br Condition Or Actio	on Set				
	Word		NodeType: Actio	n 💿 If Condi	tion	Switch Condition		
Help Fu	Browse File		Select Action Mode	User permission				
ricip	Continue to exe		User permission:	User login	+	View user related system var	ables	
	Send notificatio	n	User:	🔹 Use user name		\$Set_User_Name		
cord			Password:	\$User_Password				
onTable								
-								

12 Task Schedule

The task schedule list is used to register HMI to perform pre scheduled operations at a specified time, change the state of bit registers or the value of word registers. It is suitable for planning routine programs within a specified time frame.

• [Task Schedule] interface



Instructions for setting the scheduling operation				
Add	Add scheduling operation items			
Delete	Delete the currently selected scheduling operation item			
Clear	Delete all scheduling operations for the current project			
Edit	Modify the currently selected scheduling operation item			
Сору	Copy the currently selected schedule operation item			
Paste	Paste the copied schedule operation item			
Enable	Enable the currently selected scheduling operation item			
Enable All	Enable all scheduling operations for the current work			
Disabled	Disable the currently selected scheduling operation item			
Disabled All	Disable all scheduling operations for the current work			

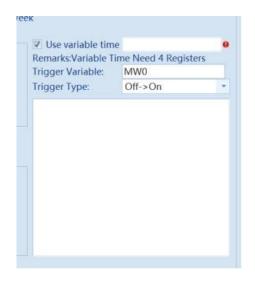
12.1 Schedule Set

Click on 'Add' and a pop-up will appear as shown in the following figure:

Execute settings: 📃 Execute when the power is turned on			
Date mode: 👩 Designated d 💿 Per year 👘 💿 Per Month 🔹 Per Week	📕 Use a single dat	2	
Time setting	Use variable time Remarks:Variable Ti		ters
Start time: 00 + H 00 + M 00 + S	Trigger Variable:	increased renega	icity.
Sunda Monda Tuesda Wedne Thursc Friday Saturde	Trigger Type:	Off->On	
End time: 00 • H 00 • M 00 • S			

Schedule Setting Instructions						
	Not checked by default. Execute when power is turned on					
	Checked 1. If the HMI starts after the scheduled time, execute the start action first.					
		2. If the HMI starts before the scheduled time and the end action is checked, the end action will				
		be automatically executed first.				
Execute	Unchecked	If the power is turned on later than the scheduling start time and the end action is checked, the				
settings		start action will not be automatically executed, but the end action will be automatically				
		executed. If the end action is not set, the scheduling interval cannot be correctly determined, so				
		the action will not be executed.				
		2. If the HMI starts before the scheduled time and the end action is checked, the start action will				
		be automatically executed first.				
Date mode	The trigger method for scheduling execution is specified date/year/month/week (using a single date)					
Time	Set the scheduling time. If the end action is enabled, the end time must be greater than the start time					
setting						
Use	Check the op	ption to use variables, set variables directly, and assign values to the variables to set the triggering				
Variable	time (data is	an array, which can be automatically assigned)				

Use variable time: Users do not need to modify and download the project through configuration. They can directly set the start/end action execution time online, and trigger the modification to take effect.



12.2 Action Set

Start Action: The action performed when the condition is met.

Action settings can be set to execute multiple actions. Execution can choose between sequential execution and full execution. Sequential execution refers to strict execution in the order in which actions are added, while full execution results in an uncertain order of execution.

Action Set		×
Trigger Mode:	Start Action 🔹	
Execute Setting:	Direct Assignment *	
Variable:	•	
Value:		
1		
e		
it.		
-		
æ		
		OK Cancell

End Action: Enable 'End Action' to take effect.

Action Set			>
Trigger Mode:	End Action		
Execute Setting:	Direct Assignment *		
Variable:		9	
Value:			

12.3 Enable Set

	Enable Set Description
Always Valid	Action always in effect
Always Invalid	Action Inhibit
Conditional Enabling	Effective when conditions are met

Dr Schedule Setting	×
Schedule Setting ActionSet EnableSet	-
Touching Enabled Setting	
🛎 Always Valid	e
AlwaysInvalid	2
Conditional Enablin Express Control False state work	
express	
Add Delete 9	
	21
ID Operation Express Parentheses	
- Help OK	Cancel

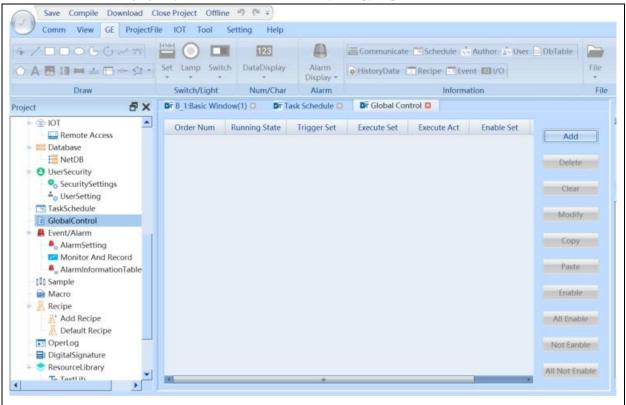
13 Global Control

Global control is used to execute global judgment actions of HMI, which can be executed periodically and predetermined actions can be executed according to certain conditions.

:

13.1 Operation Panel(GlobalControl)

As shown in the following figure, you can "add", "delete", "modify", "copy", "paste", and "enable".



Description of the operation panel (for global control)		
Add	Add global control operation items	
delete	Delete the currently selected global control action item	
Clear	Delete all global control operation items for the current project	
Modify	Modify the currently selected global control action item	
Сору	Copy the currently selected global control action item	
Paste	Paste the copied global control action item	
Enable	Enable the currently selected global control operation item	
All Enable	Enable all global control operation items for the current work	
Not Enable	Set "not enable" for the currently selected global control operation item	
All Not Enable	Set "not enable" for all global control operation items in the current work	



Right click on the selected item to select Mobility Control Data

13.2 Trigger Set

TriggerSet Ac	tionSet 9 EnableSet	
Trigger Set	er reference en reference en	
Running State:	💿 At Start Up 🔹 At Running Time	
Trigger Condition:	Always Trigger *	
Trigger Response:	🔹 Prompt Response 💿 Delay Response 🚺 🗘 *100ms	
Trigger Response: Execute Set	 Prompt Response S Delay Response 1 100ms 	
	Prompt Response Delay Response *100ms Execute Once Execute Multi Times Execute Always	
Execute Set	 Execute Once Execute Multi Times Execute Always *100ms Variable Execute Times: 1 	: Variable

			Trigge	r Set	Description	on			
	At Start Up	: Only execute of	once during HN	/II sta	artup				
	Always Trigger	: Periodic exe	cutic	on during l	IMI runtime				
	Bit State Chang	e: ON->OFF	, 0	FF->ON,	ON<->OFF, ON->	OFF(automatic reset), OFF		
	>ON(automatic	reset)							
		Word Value Cha	ange: Trigger	exec	ution whe	n the word value chang	ges, and the range of	changes	
		can be set. The	default value is	s 1					
		String Change:	Trigger execu	tion	when the	string content changes			
	At		Bitwise Logi	c: C	ON、OFF	Logic NOT			
	Running		Word Logic:	Equ	ual to, less	than, greater than, less	s than or equal to, gr	eater tha	
	Time:		or equal to, n	ot eq	ual to (va	iable or constant)			
Running	Execute		Note:						
State	when the triggering		1. Double click on the operation column to modify AND OR for multiple						
	condition	ion 2. The the con Express Condition Trigger G	conditions, and double click on the parentheses column to modify ()2. The false status can be set to take effect, and the execution can be stopped if						
	is met					n conjunction with the		opped if	
	during		Trigger Set		tart Up 🔹 At F		,		
	HMI		Trigger Condition:			•			
	operation			Ad	and a company				
				(MB0=	=ON)&&(MW1	5==1)			
					ID 1	Operation	Express MB0==ON	Parentheses	
				2	AND	MW15==1			
					e state work	and the second	ecute at condition dissatisfy		
			Trigger Response:	* Pror	npt Response	Delay Response 1 1 100	ms		

		Data Source	Perform data transmission of a single word or multiple words, with bidirectional	
		Change	transmission capability	
		Window	Execute when the current window changes	
		Switch		
Trigger	Prompt Res	sponse: Execute	immediately when conditions are met	
Response	Delay Resp	Delay Response: Execute according to the set time delay, and the Unit of time is 100ms		
	Execute Or	nce: If the condition	on is met, execute once	
Execute	Execute M	uti Times: When	the conditions are met, execute the preset number of times, in conjunction with the	
Mode	execution c	ycle and execution	on times	
	Execute Al	ways: If the cond	ition is met, execute continuously: in conjunction with the execution cycle	
Control	Explanation	n of the current gl	lobal control operation	
Description				

13.3 Action Set

Multiple actions or single actions can be executed in sequence, consistent with button execution actions

No.	Execution		Action Descr	intion	
1		Direct Assignment:MW		puon	
		Sincer issignmentariti			
Move Up	Move Down	Сору	Paste	Delete	Clear
Add Function:					
Word	Bit	Window Operation	Macro	Condition	Recipe
Browse File	Data Base	System Function	User Permission	Alarm/Event/Log	
unction executi	ion mode: 🛛 💌 Ru	n All		🙆 In Ord	er Run
Continue to e	execute the subsequ	ient functions after func	tion execution failu	re.	
Z Send notifica	tion after function e	execution failure.			
🛛 Trigger noti	fication register	ActionBit :ON:MB(
Error functio	on number register	MW19			

13.4 Enable Set

Enable Set Description		
Always Valid	Action always active	
Always Invalid	Action disabled	
Conditional Enabling –	Effective when conditions are met	
Express Control		

Control Guide			
riggerSet ActionS Touching Enabled Settin Always Valid Always Invalid Conditional Enablin Express Control express	ng		
Add Delete	e e Express	Parentheses	

14 Alarm/Event

.....

Event/Alarm contains alarm settings, data monitoring and statistics, and alarm information tables for registering event/alarm information to be recorded, as well as alarm levels, variables to be recorded when an alarm occurs, and settings for action response.

14.1 Alarm Set

Alarm settings are mainly used to set the export of alarm records and other attributes of alarms.

Auto Generate Alarm ID Alarm ID digits 3 • ID Display Leading Zero

	Alarm Set
Auto Generate Alarm ID	Check to indicate that the alarm ID will be automatically generated when an alarm occurs
Alarm ID digits	Set the number of digits displayed for the alarm ID, with a minimum of 1 digit and a maximum of 5 digits
ID Display Leading Zero	If checked, it means that the alarm ID on the alarm component will be displayed in the form of a leading 0. For example, if the alarm ID is 1 and the number of digits displayed for the alarm ID is 2. If checked, it will display 02

1. In the "Alarm Group" dialog box, corresponding properties can be set.

Alarm can be grouped to indicate the priority of the alarm. The "Default Alarm Group (0)" alarm group is preset in the alarm group, which is the root node and has only one root node; The alarm group can support up to 5 levels of nodes, and the same level can support up to 99 nodes; The serial number in the name is the alarm group



Alarm Set - Alarm Group Description		
Edit	Edit the currently selected alarm group	
Add	Add the next level node of the currently selected alarm group	
Delete	Delete the currently selected alarm group	

2. In the "Alarm Level" dialog box, corresponding properties can be set.

Alarms can be graded to indicate the importance of the alarm. By default, the system has three alarm levels, Critical, Important, and Tips.

Value	: Descrip	vel diagra	Edit
.0	Critical		Add
1	Importa	\wedge	Delete
2	Tips	\wedge	Move Up
			Move Down

	Alarm Set-Alarm Level description
Alarm Level	① Value: ID of the alarm level, cannot be modified
	② Level Description: The name of the alarm level
	③ Level diagram: Diagram of the alarm level
Edit	1. Edit the level description and level diagram of the currently selected alarm level
	2. The font color and background color of the alarm line can be set for the alarm level: the
	background color is effective for real-time alarm tables and historical alarm tables; The font
	color is valid for alarm bars, real-time alarm tables, historical alarm tables, etc., and only for
	triggering states
	3.Alarm description: Text library can be used
Add	③ Level diagram: Diagram of the alarm level
Delete	Edit the level description and level diagram of the currently selected alarm level
Move Up	Add alarm level
Move Down	Delete the currently selected alarm level

3. In the "Alarm Type" dialog box, corresponding properties can be set.

Alarms can be divided into different types to indicate the category of the alarm. The system has Alarm, Confirm, and Recovery alarm types by default.

Value	Туре	lescriptio	Edit
	Alarm	Alarm	
1	Confirm	Confirm	
2	Recovery	Recovery	

Alarm Set- Alarm Level Description		
Alarm Type	① Value: The ID of the alarm type, which cannot be modified	
	② Type: The type of alarm, which cannot be modified	
	③ Description: The description of the alarm type, which can be modified. The content	
	displayed in the "Alarm Status" column on the alarm component	
Edit	Edit the alarm description of the currently selected alarm type	

4. In the "Enable Alarm Record" dialog box, corresponding properties can be set.

Alarm records are used to save the alarm information generated during the project's operation, so that it can be viewed and analyzed in the future.

The difference between "Export Record" in alarm settings and "Export Set" in alarm components:

1. The "Export Record" in alarm settings is to export background alarm information.

2. The "Export Set" in the alarm component is to export the alarm information displayed by the current component.

Basic Window(1) 💷 🛛	🛱 Task Schedule 🖾 👘 Global Control 🖾	📑 Alarm Setting 🖾	le j		
🛛 Auto Generate Alarm	i ID 🛛 Alarm ID digits 📴 🔽 ID Display Lea	ding Zero			
Enable Alarm Record	1				
Export Record			Record Type		
Export Devices	HMI -		Alarm	🔽 Confin	n 🛛 🛛 Recove
Export subfolder	alarm 📃 Use dynamic subfo		Record Save		
Dally scheduled exp	ort Export time 0 : Hour: 0 : Min			0	No. 11 m
Trigger Export	Trigger Variable		Record Save	Days	- 7
Trigger Type	Off->On *		RecordRetenti	onReached:	Delete oldest red
Start Time	End Time				
Export File Format	CSV T File Encryption				
Password	888888888 Dynamic password				
Export Data Sorting	Sorted by time ascending	Sorted by time ascending			
Export Report Format	Export different alarm types of the same	alarm by branch 👘			
Export State					
Export State Explain:0:	initial state, 1: export successful, 2: no externa	memory, 3: write error			
Export Channel Setting	S				
Language Independ	ent Display Language English(Latin)				
The export time con	tains milliseconds				
Z Export title	🖲 Direct input 👘 Use	TextLib			
Use Name	Title Name Set	Move Up			
☑ #号	No.	Move Down			
☑ 报警等级	Alarm level	Default Sort			
☑ 报警内容	Alarm content				
	Alarm ID	¥.			

	Alarm Set - Record Export Instructions
Export Devices	Export and save alarm information to external storage devices
Use dynamic devices	Dynamically setting export devices using string variables
Export Subfolder	Set the name of the sub folder for exporting alarm information. If this item is blank, the alarm
	information will be saved in the "data" folder of the project root directory by default
Use dynamic	Dynamically setting the name of a subfolder using string variables
subfolder	
Daily scheduled	Set the export time and regularly export alarm information every day
export	
Trigger Export	Export alarm information triggered by the status of bit variables
Trigger Type	Set the triggering method for triggering export bit variables
Start Time	Set the start time for export. Please use time component settings when configuring. For time
	components, please refer to Chapter 8.9.1: Time
End Time	Set the end time for export. Please use time component settings when configuring. For time
	components, please refer to Chapter 8.9.1: Time
Export File Format	Set the file format for exporting alarm information, including CSV and PDF
File Encryption	If checked, the exported file format is a compressed package, and a password is required to
	successfully extract the file. If 【File Encrypt】 is not checked, the exported file format is set in
	the [Export File Format] option, and the file can be opened directly
Dynamic password	Use string variables to dynamically set the password for file encryption, which is valid when [File
	Encryption] is checked

Export Data Sorting	Set the sorting method for exported data, including two options: "Sort by time ascending" and "			
	Sort by time descending"			
Export Report	Set the record format for exporting alarm information, including "Export different alarm types of			
Format	the same alarm by branch" and " Export different alarm types of the same alarm in one row". When			
	selecting ' Export different alarm types of the same alarm by branch ', the data table in' Expo			
	Channel Settings' will have an 'Alarm Status' title bar. For example, when an alarm message has			
	three states: triggered, acknowledged, and restored, if you select " Export different alarm types of			
	the same alarm by branch", the exported data table will display three states: triggered,			
	acknowledged, and restored in different branches. Otherwise, it will not be displayed.			
Export State	Reflect the exported state through the value of the word variable. 0 indicates the initial state; 1			
	indicates successful export; 2 indicates no external memory; 3 indicates a write error			

5. In the "Export Channel Settings" dialog box, you can set the corresponding attributes.

"Export Channel Settings" are used to set the properties of the exported alarm information table.

The		lent Display Language Englis Itains milliseconds Oirect input	h(Latin)	
Use	Name	Title Name S	Set	Move Up
	序号	No.	1	Move Down
V	报警等级	Alarm leve	1	Default Sort
V	报警内容	Alarm conte	nt	
101	据数ID	Alarm ID	¥	

	Alarm Set - Export Channel Settings Description
Language Independent	If checked, the selection box after [Display Language] is invalid, and the component
	defaults to using the first language
Display Language	Set the language of the title bar, which is valid when 【Language Independent】 is not
	checked
The export time	If checked, the time in the exported alarm information table includes milliseconds
contains milliseconds	
Export title	If checked, the exported alarm information table includes a title bar, which is checked by
	default
Direct input	The 【 Title Name Set 】 column in the 【 Export Channel Setting 】 data table uses direct
	input to modify the title block name
Use Text Lib	The 【Title Name Set 】 column item in the 【Export Channel Setting】 data table can use
	the text library
Move Up	Move up the currently selected alarm level
Move Down	Move down the currently selected alarm level
Default Sort	Restore to the original sorting of the data table

6. In the "Record Type" dialog box, corresponding properties can be set.

"Record Type" is used to set the alarm type of alarm information in the exported alarm information table. It includes three record types: alarm, confirm, and recovery. By default, three types are checked. If a certain item is not checked, there will be no alarm type for this item in the exported alarm information table.



7. In the "Record Save" dialog box, corresponding properties can be set.

Record Save				
Record Save	Days	*	7	\$
RecordRetentio	onReached:	Delet	e oldest recor	*

Alarm Set - Record Save Instructions			
Record Save	Set the attributes to be retained in the exported alarm information table. The unit can be selected as "Days" or "Number". When selecting 'Days', the minimum value is 1 day and the maximum value is 365 days; When selecting 'Number', the minimum value is 1 item and the maximum value is 100000 items		
Record Retention Reached	When the alarm information table reaches the "record retention" number, new data is recorded according to the set "record retention reached" method, including "delete the oldest record" and "not save new records"		

14.2 Monitor and Record

Data monitoring and recording are used to configure variable data that needs to be displayed in alarm information. There are two situations: the first is to display real-time data of certain variable values when the alarm is triggered in the alarm text, and the second is to monitor the historical changes of alarm related variables. Monitoring changes in data is the second situation.



1. Only when monitoring variables are added to "Monitor and Record " can monitoring variables be associated with the alarm entries in the "Alarm Information Table".

2. Insert up to 8 monitoring variables into an alarm message.

1. In the "Alarm Data Monitor " dialog box, corresponding properties can be set.

itor Variable		Add
Num	Variable Name	Clon
		Delet
		Clea
		Modi
		Copy
		Cop

Alarm Data Monitor - Export Channel Setting Description					
Add	dd Add monitoring variables				
Clone	Clone the current monitoring variable. Clicking the 【Clone】 button will pop up the "Set Monitoring				
	Variable" window, where the attributes of the variable are consistent with the currently selected variable				
	attributes				

Delete	Delete the currently selected variable
Clear	Clear all variables
Modify	Edit the properties of the currently selected variable
Сору	Copy the currently selected variable
Paste	Paste the currently selected variable
Import	Import Monitoring Variable Table
Export	Export the current monitoring variable table

2. In the "Alarm Statistics" dialog box, corresponding properties can be set.

1	V Alarm Statistics
	All Grouped Alarm Statistics
	Report the current alarm count[All group]
	Report the cumulative alarm count[All group]
	Current alarm status[All group]

Monitor and Record - Alarm Statistics Description		
Report the current alarm	Display the current alarm count through word variables	
count [All group]		
Report the cumulative	Display the cumulative number of alarms that have occurred through word variables	
alarm count [All group]		
Current alarm status [All	Determine whether there is currently an alarm triggered by the status of the bit variable. As long	
group]	as an alarm is triggered, the current alarm status variable will be set to 1	

14.3 Alarm Information Table

A library component used to register alarm information. It is possible to register alarm information triggered by bit variables, word variables, and expression conditions.

1. In the "Alarm Info Table" dialog box, corresponding properties can be set.

	rm Settin	ng 🛄	Br Monitor And	Record 🖾 🔰 🗖	Alarm Info Table 🚨			
Alarn	nGroup:	All Grou	qu		-			
larn	n Level:	All Leve	el		-			
ind:		Search						
lun	Alarm V	/ariable	Alarm Conditon	Alarm Content	Alarm Group	Alarm Level	Alar	Add
1	MB0		MB0 = on	On	Default Alarm Group	Tips	001	Clone
								Delete
								Clear
								Modify
								Modify
								Modify Copy
								Modify Copy Paste
								Modify Copy Paste Enable

	Alarm Information Table Description				
Alarm Group	Filter alarm information by alarm group				
Alarm Level	Filter alarm information by alarm level				
Find	Search for alarm information				
Add	Add alarm information				
Clone	Clone the current alarm information. Clicking the [Clone] button will pop up the "Alarm Entry Attribute Settings" window. The attributes of the alarm information are consistent with the currently selected alarm information attributes				
Delete	Delete the currently selected alarm information				
Clear	Clear all alarm messages				
Modify	Edit the properties of the currently selected alarm information				
Сору	Copy the currently selected alarm information				
Paste	Paste the currently selected alarm information				
Enable	Set the currently selected alarm information to be valid				
All Enable	Set all alarm information to be valid				
Not Enable	Invalid setting of the currently selected alarm information				
All Not Enable	Set all alarm information invalid				
Import	Import Alarm Information Table				
Export	Export the current alarm information table				

2. Click the "Add" button to set the properties of alarm information in the "Alarm Entry Property Set" dialog box. The following is a description of bit variable alarm types.

🗊 Alarm Entry Property Set					×
AlarmInfo Set 9 Alarm Enable Set					
Alarm Type	Alarm Unique ID	Alarm Level	Alarm Variable		
Bit • On •	001	2:Tips •			9
Alarm Group Name			Trigger Count Statistics		
Default Alarm Group		Ŧ			
 Prohibit delete when triggered Allow r 	records to be stored				
Alarm Text					
On					¢
					80
Use Text Lib	<u>.</u>				
<u> </u>	T				
Please input description					
				Cancel	ОК
Alarm Info	ormation Table -	Bit Variable Alarm H	Entry Properties Descri	ption	

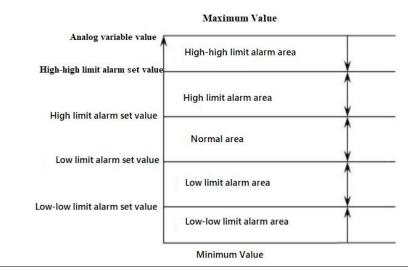
Alarm Type	Set alarm information for alarm information, including bits, words, and expressions		
Alarm Unique ID	The ID of the alarm message. Modification is not allowed, system automatically assigns		
Alarm Group Name	Set the group name for alarm information		
Alarm Level	Set the level of alarm information		
Alarm Variable Set trigger variables for alarm information			
Accumulated number	Record the cumulative total number of triggers		
of triggers			
Prohibit delete when	Check to indicate that deletion on the alarm component is not allowed when this alarm message is		
triggered	triggered		
Allow records to be	Check to indicate that this alarm information is allowed to be stored		
stored			
Switch value alarm	The triggering conditions for bit variable alarm information, including ON, OFF, and Change.		
	There are two types of Changes: ON ->OFF and OFF ->ON		
Alarm Text	The text content displayed after the alarm message is triggered. Click the [Set] button to add		
	monitoring variables. The added monitoring variables will be displayed in the alarm text. When the		
	alarm is triggered, the current status or data of the monitoring variables will also be displayed		
Action	Set the actions to be executed during alarm triggering, confirmation, and recovery		
Use Text Lib	Alarm text using text library		
Text state switch variable	Switch the state of text through word variables. Valid when checking [Use Text Lib]		

3. Click the **[**Add**]** button to set the properties of alarm information in the **[**Alarm Entry Property Set**]** dialog box. The following is a description of the alarm types for word variables.

> Word Variable Off-limit alarm



When a variable value changes, if it crosses a certain limit value, an "Off-limit alarm" will immediately occur. At a certain moment, there may only be one type of out of limit alarm for a variable, so only one type of out of limit alarm is generated. For example, if the value of a variable exceeds the high-high limit, a high-high limit alarm will be generated instead of a high limit alarm. In addition, if the limit is exceeded twice, it is necessary to check whether the two limits are of the same type. If so, no new alarm will be generated, but it does not mean that the alarm has been restored. If not, the original alarm will be restored first and then a new alarm will be generated. The schematic diagram is shown in the following figure:



arm Type		Alarm Unique ID	Alarm Level	Alarm Variable	
/ord -	Off-limit alarm	001	2:Tips	•	
arm Group Nam	ne			Trigger Count Statistics	
efault Alarm Gr	oup			•	
Prohibit delete	e when triggered 🛛 🗹 Allow r	ecords to be stored	Alarm delay(second)	5 📩	
 Low low 	Limit value		Dynamic limit v	alue	
	50		*		
	Alarm Text				
	LowLow				\$
	Use Text Lib	- Tr			
 Low 	Limit value		Dynamic limit v	alue	
	150		* *		
	Alarm Text				
	Low				\$
	Use Text Lib]
lease input desc					

Alarm Information Table	e - Word Variable Off - Limit Alarm			
Alarm Type	Set alarm information for alarm information, including bits, words, and expressions			
Alarm Unique ID	The ID of the alarm message. Modification is not allowed, system automatically assigns			
Alarm Group Name	Set the group name for alarm information			
Alarm Level	Set the level of alarm information			
Alarm Variable	Set trigger variables for alarm information			
Over limit or deviation	Set the overrun or deviation alarm delay time, which is in seconds. The default is 5 seconds, and			
alarm delay	the range is 1-60 seconds. The alarm delay is only valid when triggered, but invalid after the alarm			
	is recovered. If a new alarm is triggered within the delay time, the timing will restart			
Prohibit delete when	Check to indicate that deletion on the alarm component is not allowed when this alarm message is			
triggered	triggered			
Allow records to be	Check to indicate that this alarm information is allowed to be stored			
stored				
OFF - limit alarm	When defining the limit value, it should be: low-low limit value <low limit="" limit<="" td="" value<high=""></low>			
	value <high-high an="" correct,="" error="" error;="" if="" in="" is="" it="" limit="" not="" prompt="" td="" the<="" there="" value.="" will=""></high-high>			
	dynamic limit value, the alarm will not be triggered. The over limit alarm includes four types:			
	low-low, low, high, and high-high			
	1 Low-low: An alarm is generated when the value of the alarm variable is lower than the low			
	limit value, and the low limit alarm is restored when it is greater than the low limit value			
	2 Low: When the value of the alarm variable is lower than or equal to the low limit value, an			
	alarm is generated, and when it is greater than the low limit value, the low limit alarm is restored			
	③ High: When the value of the alarm variable is greater than the high limit value, an alarm is			
	generated, and when it is less than the high limit value, the high limit alarm is restored			
	④ High-high: When the value of the alarm variable is greater than or equal to the high-high limit			
	value, an alarm is generated, and when it is less than the high-high limit value, the high-high limit			
	alarm is restored			
Dynamic limit value	Using variables to dynamically modify boundary values			
Action	Set the actions to be executed during alarm triggering, confirmation, and recovery			

Alarm Text	The text content displayed after the alarm message is triggered. Click the [Set] button to add
	monitoring variables. The added monitoring variables will be displayed in the alarm text. When
	the alarm is triggered, the current status or data of the monitoring variables will also be displayed
Use Text Lib	Alarm text using text library
Text state switch	Switch the state of text through word variables. Valid when checking [Use Text Lib]
variable	

Word Variable Deviation Alarm

Deviation alarm is an alarm generated when the fluctuation of the analog value relative to the target value exceeds the specified range of change. During the process of variable changes, if a certain limit value is crossed, an alarm will be immediately generated. However, there will not be two types of deviation alarms generated at the same time.

The schematic diagram is shown below.

The deviation alarm limits are calculated as follows:

①Small deviation alarm limit value = deviation target value + - defined small deviation value;

⁽²⁾Large deviation alarm limit value = deviation target value + - defined large deviation value;

The deviation alarm has the following four cases:

① Small deviation alarm is generated when it is greater than or equal to the small deviation alarm limit

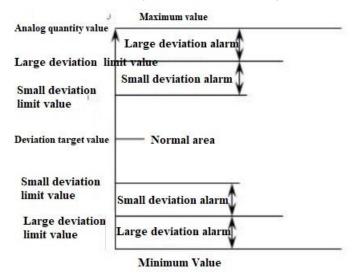
⁽²⁾The large deviation alarm is generated when it is greater than or equal to the large deviation alarm limit

③ Small deviation alarm is generated when it is less than or equal to the small deviation alarm limit

(4)Generate a large deviation alarm if it is less than or equal to the large deviation alarm limit

For example, if the target deviation value is 100, the small deviation value is 20, and the large deviation value is 80, then the small deviation alarm limit = deviation target value + - defined small deviation value = 80,120, and the large deviation alarm limit = deviation target value + - defined large deviation value = 20,180.

Assuming that the minimum value of the variable is 0 and the maximum value is 255, the small deviation alarm is generated when the value of the variable is in the range of [120,180); the large deviation alarm is generated when the value of the variable is in the range of [180,255]; the small deviation alarm is generated when the value of the variable is in the range of [80,20); the large deviation alarm is generated when the value of the variable is in the range of [20,0]; and the large deviation alarm is not generated when the value of the variable is in the range of (80, 120), no alarm is generated, i.e., the normal area.



arm Type		Alarm Unique ID	Alarm Level	Alarm Variable	
Vord -	Deviation alarm	001	2:Tips	•	0
arm Group Name				Trigger Count Statistics	
efault Alarm Group				Ŧ	
Prohibit delete wh		cords to be stored	Alarm delay(sec		
Target value	Numerical value		Dynamic v	alue	*
	100		÷		
 Small deviation 	Numerical value		Dynamic	value	
	20		¢		
	Alarm Text				
	Small Deviation				
	Use Text Lib				
		- Tr			
 Large deviation 	Numerical value		Dynamic	value	
	80		Ĵ.		
	Alarm Text				
	Large Deviation				۵.

	Alarm Information Table - Word Variable Deviation Alarm
Alarm type	Set alarm information for alarm information, including bits, words, and expressions
Alarm Unique ID	The ID of the alarm message. Modification is not allowed, system automatically assigns
Alarm Group Name	Set the group name for alarm information
Alarm Level	Set the level of alarm information
Alarm Variable	Set trigger variables for alarm information
Over limit or deviation	Set the overrun or deviation alarm delay time, which is in seconds. The default is 5 seconds, and
alarm delay	the range is 1-60 seconds. The alarm delay is only valid when triggered, but invalid after the
	alarm is recovered. If a new alarm is triggered within the delay time, the timing will restart
Prohibit delete when	Check to indicate that deletion on the alarm component is not allowed when this alarm message
triggered	is triggered
Allow records to be	Check to indicate that this alarm information is allowed to be stored
stored	
Deviation alarm	The value of small deviation must be smaller than the value of large deviation, and the preset
	value is used when the dynamic deviation value is incorrect. Deviation alarms include two
	types: small deviation and large deviation
Deviation setting usage	Check to indicate the percentage of deviation value used
percentage	
Dynamic value	Using variables to dynamically modify deviation and target values
Action	Set the actions to be executed during alarm triggering, confirmation, and recovery
Alarm Text	The text content displayed after the alarm message is triggered. Click the [Set] button to add
	monitoring variables. The added monitoring variables will be displayed in the alarm text. When
	the alarm is triggered, the current status or data of the monitoring variables will also be
	displayed
Use Text Lib	Alarm text using text library
Text state switch variable	Switch the state of text through word variables. Valid when checking [Use Text Lib]

Alarm Entry Prope	rty Set					>
AlarmInfo Set	Alarm Enable Set					
larm Type Word * larm Group Name		Alarm Unique ID	Alarm Level 2:Tips *	Alarm Variable		9
Default Alarm Grou		ecords to be stored	Alarm delay(second)	5 🚊		
Change rate	Unit % 20 Alarm Text Change Rate Overrun Use Text Lib Second O Minute	_ T ₽ ○ Hour	Dynamic change	rate		DON
Please input descri	ption					
					Cancel	ОК

	Alarm Information Table - Word Variable Change Rate alarm
Alarm Type	Set alarm information for alarm information, including bits, words, and expressions
Alarm Unique ID	The ID of the alarm message. Modification is not allowed, system automatically assigns
Alarm Group Name	Set the group name for alarm information
Alarm Level	Set the level of alarm information
Alarm Variable	Set trigger variables for alarm information
Over limit or deviation	Set the overrun or deviation alarm delay time, which is in seconds. The default is 5 seconds,
alarm delay	and the range is 1-60 seconds. The alarm delay is only valid when triggered, but invalid after
	the alarm is recovered. If a new alarm is triggered within the delay time, the timing will restart
Prohibit delete when	Check to indicate that deletion on the alarm component is not allowed when this alarm message
triggered	is triggered
Allow records to be	Check to indicate that this alarm information is allowed to be stored
stored	
Change Rate	Set the limit value for the rate of change alarm. There are three types of rate of change alarms
	(in units of time): seconds, minutes, and hours
Dynamic change rate	Using variables to dynamically modify the rate of change
Action	Set the actions to be executed during alarm triggering, confirmation, and recovery
Alarm Text	The text content displayed after the alarm message is triggered. Click the [Set] button to add

> Word Variable Change Rate Alarm

Change Rate alarm refers to an alarm generated when the value of an analog quantity changes faster than a specified value over a period of time, that is, when the variable changes too quickly. During system operation, whenever a variable undergoes a change, the system automatically calculates the speed of the variable change to determine whether an alarm is generated.

	monitoring variables. The added monitoring variables will be displayed in the alarm text. When
	the alarm is triggered, the current status or data of the monitoring variables will also be
	displayed
Use Text Lib	Alarm text using text library
Text state switch variable	Switch the state of text through word variables. Valid when checking [Use Text Lib]

4. Click the **[**Add**]** button to set the properties of alarm information in the **[**Alarm Entry Property Set**]** dialog box. The following is an explanation of the expression alarm type.

larmInfo Set 9 Alarm Enable				
rm Type	Alarm Unique ID	Alarm Level		
v None	· 001	2:Tips *		
rm Group Name			Trigger Count Statistics	
fault Alarm Group		*		
Prohibit delete when triggered	 Allow records to be stored 	Alarm delay(second)	5 🕂	
+ 🛅 9				
+ 💼 9				
	Express		Parentheses	
ID Operation	Express		Parentheses	
	Express		Parentheses	
	Express		Parentheses	
ID Operation	Express		Parentheses	
ID Operation	Express		Parentheses	
ID Operation	Express		Parentheses	¢
ID Operation	Express		Parentheses	
ID Operation	Express		Parentheses	

Alarm Information Table - Expression Alarm

	Finanti information fuelo Expression finanti
Alarm Type	Set alarm information for alarm information, including bits, words, and expressions
Alarm Unique ID	The ID of the alarm message. Modification is not allowed, system automatically assigns
Alarm Group Name	Set the group name for alarm information
Alarm Level	Set the level of alarm information
Alarm Variable	Set trigger variables for alarm information
Over limit or	Set the overrun or deviation alarm delay time, which is in seconds. The default is 5 seconds, and
deviation alarm delay	the range is 1-60 seconds. The alarm delay is only valid when triggered, but invalid after the
	alarm is recovered. If a new alarm is triggered within the delay time, the timing will restart
Prohibit delete when	Check to indicate that deletion on the alarm component is not allowed when this alarm message
triggered	is triggered
Allow records to be	Check to indicate that this alarm information is allowed to be stored
stored	
Add	Click the 【Add】 button to add expressions for bit or word variables
Alarm status	The alarm status includes two types: ON and OFF. ON indicates that the expression is valid,
	OFF indicates that the expression is not valid
Alarm Text	The text content displayed after the alarm message is triggered. Click the [Set] button to add
	monitoring variables. The added monitoring variables will be displayed in the alarm text. When

	the alarm is triggered, the current status or data of the monitoring variables will also be displayed
Action	Set the actions to be executed during alarm triggering, confirmation, and recovery
Use Text Lib	Alarm text using text library
Text state switch	Switch the state of text through word variables. Valid when checking [Use Text Lib]
variable	

5. Click the **[**Add**]** button to set the properties of alarm information in the **[**Alarm Entry Property Set**]** dialog box. The following is an explanation of alarm enable settings.

Used to configure whether the current alarm information is valid (default is always valid). When the alarm enable is set, if the alarm variable only meets the triggering conditions but does not meet the enabling conditions, then this alarm is also invalid.

100	SF Alarm Entry Property Set	×	5
5	Conditional Enablin		2
2	Express Control False state work express Add Delete e		
te ii	ID Operation Express Parentheses		C C C E I C L
	Description:		No A IN A D A
	OK Cancel	ā	· 142

Alarm Information Table - Alarm Entry Property Set - Alarm Enable Set Description				
Always Valid	Check to indicate that the current alarm information is always valid			
Always invalid	If checked, it indicates that the current alarm information has been invalid and the current alarm is			
	disabled			
Display invalid	If checked, the alarm message will display an invalid flag. Valid when checking 【Always Invalid】			
flag	and 【Conditional Enabling】			
Show grayscale	If checked, the font color of the alarm information will be displayed in grayscale. Valid when			
font	checking 【Always Invalid】 and 【Conditional Enabling】			
Conditional	Check to indicate that the current alarm information is only valid when the specified bit or word			
Enabling variable meets the set conditions				
False status work	Switch the state of text through word variables. Valid when checking [Use Text Lib]			

15 Sample

Data sampling mainly involves setting the sampling method, sampling variables, period, and other related attributes for historical data and trend graphs.

• [Data Sampling List] interface

ID/Description/Sample Variable								
+ 🖻 🚖 🖻 🚯								
ID		Description	Sample Variable	Method	Cycle/Trigger Addr	Cleared Variable	Status	Occupied Space
		sample1	MW10	Cycle	1Sec		Always valid	в 84.38 К

	Data Sampling List Setting Instructions			
+	Add data sampling item			
a	Delete the currently selected sampling item			
Delete all data sampling items in the current project				
	Copy the currently selected data sampling item			
ß	Paste the copied data sampling item			
C Enable	Enable the currently selected data sampling item			
Enable All	Enable all data sampling items in this list			
C9 Disable	Prohibit enabling the currently selected data sampling item			
🕑 Disable All	Disable all data sampling items in this list			
15 1 Decie				

15.1 Basic

Click on + icon and the interface shown in the following figure will pop up

D	🖬 Data Sampling 🛛 🗙						
	Basic	Channel Cor	dition				
	Description Sample	e1					
	Contition Cycle * Fixed Cycle *						
	Cycle 1 Second Variable						
	▼ Control Setting						
	Clear control						
		hen the specified windo	w is open B 1:B	asic Window(1) -	New basic window		
	 Capacity Settin 	-					
	Record Days	• 7 .		Up to max	Delete earlest	r	
	4			Settings Description	· . 1 1 1 1 .	1	
Description	to call data so	-	g nems, maki	ing it convenient for histor	ical data and trend c	chart components	
		Fixed Cycle	Set a con	stant period, in seconds or	r 100 milliseconds, a	and sample every	
	Cycle			npling period			
		Fixed Time Sampling is performed every other sampling cycle within a specified time period, in seconds or 100 milliseconds					
	Perform a data sampling according to the specified triggering method (on<=>off. on ->off. off						
	Bit ->on, on ->off (automatic reset), off ->on (automatic reset))						
	Word	Collect when changes occur Perform a data sampling once the specified word variable changes					
		Comply with Perform a data sampling when the value of the specified word variable					
		variable range changes between two consecutive times within the specified range of					
		acquisition changes Bit:ON、OFF、Logical Not					
a			0	or equal, greater or equal,	not equal(variable or	r constant)	
Contition		-	-	operation column for mult			
		and double clicki	ng on the par	entheses column can modi	fy ()	7	
		Contition Expression *					
		+ 💼					
	Expression	(MB0==ON)&&((MB1==ON) (MW0==1))					
		ID Op	eration	Eveneer	Parentheses		
		1	eration	Express MB0==ON	Parentneses		
		2	AND	MB1==ON	(
		3	OR	MW0==1)		
	Clear						
Control	control	Bit variable contr	ol, when the	state is ON, clears all samp	pling records in mem	ory	
Setting	Execute only	when the specified	window is o	pen: After checking, data	sampling will only b	e executed in the	
	specified win						
Capacity	Record	Choose to save sa	ampling recor	ds by days or items			

Setting	Up to max	Choose to delete the earliest record or stop sampling when the number of records saved is up to max	
	1. Cycle/timing: occupying storage space for 24 hours; (Number of samples * Sampling variable data, data		
Occupied	type 8 bits occupy one byte)		
space	2. Timing (variable time), constant time selection of variables, displayed according to 1000 * data types		
	3. Trigger/expression: 1000 entries occupy storage space;		

15.2 Channel

• [Channel setting] interface

+ 💼 🚖				
ID	Channel Name	Variable Name	Description	
1	Channel1	MW0		

	Channel Setting List Description			
+	Add a new data sampling channel, supporting up to 256 channels			
1	Delete the currently selected sampling channel			
=	Delete all sampling channels			
15 0 0				

15.3 Export

15.3.1 Export property settings

	1	
Export		
Exported Device Exported Folder		Dynami
HMI sample		
Export Method		
Daily Scheduled Export		
0 : Hour 0 : Minute		
Triggered Export		
Trigger Type Trigger Variable		
Off->On 👻		
Start Time	End Time	
Exported File Format	Password	🗌 Dynami
PDF The End		
Export Data Sorting		
Sorted by time ascending		
Export State		

Exported Device Export and save data same	pling information to an external storage device
---	---

Exported Folder	Set the subfolder name of the exported data sampling information, if the export is successful, the subfolder name will be generated in the folder corresponding to the exported device under the path of project directory "/disk". If the export is successful, the subfolder name will be generated in the folder corresponding to the exported device under the path of project directory "/disk", and Sample is the default subfolder name.
Using Dynamic Subfolders	Dynamically setting subfolder names using string variables
Daily Scheduled Export	Set the export time to export data sampling record information on a daily basis.
Triggered Export	Export of data sampling log information by state triggering of bit variables, note: choose at least one of the two export methods.
Trigger Type	Setting the trigger type for triggering exported bit variables
trigger variable	Triggering an export with a bit variable
Start time	To set the start time of export, use the time element setting for configuration, time element <u>Please</u> refer to subsection 8.9.1 Time
End time	Set the end time of the export, and use the time element to set it during configuratio, time element Please refer to subsection 8.9.1 Time
Export File Format	Set the file format for exporting data sampling information, including CSV and PDF.
file encryption	Check the exported file format is compressed, decompression of files need to enter a password to successfully decompress, if you do not check the [file encryption], the exported file format is set in the [export file format] option file format, directly open the file can be
dynamic password	Use string variables to dynamically set the password for file encryption, valid when [File Encryption] is checked.
Export data sorting	Set the sorting method of exported data, including "ascending order by time" and "descending order by time".
Export State	The export status is reflected by the value of the word variable. 0 Initial status; 1 Successful export; 2 No external memory; 3 Write error

15.3.2 Export Channel Settings

Channel Sett	ting				
Language In	dependent		English(Latin)	*	Input directly
Export time contains milliseconds value					
Export title I	bar				
Move up	Move down	Restore to default			Filter channel
Name	Title Name Set				4
Date	Date				
Time	Time				
Channel1	Channel1				

	Description of data sampling and export channel settings
Language Independent	Checking this box disables the language selection box and the component defaults to the first language.
Export time contains milliseconds value	Check to include milliseconds in the exported data sampling information table.
Export title bar	Checked if the exported data sampling information form contains a title bar, checked by default.
Input directly	The "Title bar name settings" column in the "Export channel settings" data form uses direct input for modifying the title bar name.
Use TextLib	Use of text libraries for the "Title bar name settings" column in the "Export channel settings" data table
Filter channel	Default select all, can manually filter/cancel the corresponding channel display
Move up	When a data table row is selected, click [Move Up] to move up the selected row. The [Move Up] button is effective except when the first row of the data table is selected.

Move down	When a data table row is selected, click [Move Down] to move down the selected row. The [Move Down] button is effective except when the last row of the data table is selected.
Restore to default	Revert to the original sorting of the data table

15.4 Condition

Data Sar	npling				
Basio	c Char	nnel Cond	lition 🔒		
Always	Valid O Alv	vays Invalid	Condition	enable	
 Expres 	sion Control	FALSE st	tatus takes effe	ect	
Expression	1				
+ 💼	9				

Description of enabling conditions				
Always Valid	Action always in effect			
Always Invalid	Action remains invalid			
Condition enable	Effective when conditions are met			

16 Macro Instruction

Macro instructions use C language source code editing to meet special applications such as user logic and arithmetic operations. The use of macro instructions in conjunction with related components can achieve functions such as computation or logic that cannot be achieved by components, making the programming ability of HMI more powerful.

Macrolati Di Macrolane iroq Description irticul 1 Macro_1 No 2 Macro_2 No New Coine Delete Modify Macrotation Search for search Replace Att Case sensitive Whole word only Use regular expressions Scope: All Maro + Search Replace Replace Att	RewMacro Save SaveAll Cut Copy Paste		ompileAll	MacroList InputAssist Information
Information Search for: Scope: All Maro Search Search Replace with: Search Replace Replace All	1 Macro_1 No 2 Macro_2 No			Operator Variable Declaration Device Communication Clanguage Common Functions
Search for: Search 10: Replace with: Case sensitive Whole word only Use regular expressions Search Replace Alt	personal second s		1-2-1	ex.
Input Assist Information List Find and Replace	Search for:			Case sensitive T Whole word only T Use regular expressions
	Input Assist Information Information List Finds	and Replace		

Description od Macro Instruction			
New	Create a new macro instruction		
Clone	Copy a macro instruction		
Delete	Delete a macro instruction		
Modify	Modify the name and grouping of macro instructions		

16.1 Macro Instruction Syntax

Definition of constants

Constants are fixed values that do not change during program execution. These fixed values are also called literal quantities.

Constants can be any basic data type, such as integer constants, floating-point constants, character constants, or string literals. Constants are like regular variables, but their values cannot be modified after being defined.

Integer constant

Integer constants can be Decimal, Octal, or hexadecimal constants. The prefix specifies the radix: 0x or 0X represents hexadecimal, and 0 represents Octal. If there is no prefix, it defaults to a Decimal constant.

- . Decimal integer: 345, -234, 0, 23456
- . Hexadecimal number: 0x3b, 0xffff; Must start with 0x
- . Octal number: 037, 077; Must start with 0
- Boolean: true, false;
- Floating point constant

A floating-point constant consists of an integer part, a Decimal separator, a decimal part, and an exponent part. You can use decimal or exponential forms to represent floating-point constants.

. Floating-point arithmetic number: 3.14159.

Character constant

Character constants are enclosed in single quotes. For example, 'x' can be stored in a simple variable of type char.

String literals or constants are enclosed in double quotes. A string contains characters similar to character constants: ordinary characters, Escape sequence, and common characters.

Character type: 'a'. Characters must use single quotation marks

. String: 'hello, dear'. String must use double quotes' '

➢ Variable

A variable is actually the name of a storage area that a program can manipulate. Each variable in C has a specific type. The type determines the size and layout of variable storage. Values within this range can be stored in memory, and operators can be applied to variables, which change with the execution result of macro instruction statements.

The name of a variable can consist of letters, numbers, and underscore characters, and must start with a letter or underscore. Uppercase letters are different from Minuscule. The cache name reserved by the system cannot be used as a variable name because C is case sensitive.

Туре	Description	Scope
bool (Boolean type)	1 bit (One bit)	0, 1
char (Character type)	8 bits (One byte)	±127
short (Short Integer)	16 bits (One character)	±32767
int (Double Integer)	32 bits (Double characters)	±2147418112
float (Floating Point)	32 bits (Double characters)	Use 1 bit for symbols, 8 bits for exponents, and 23 bits for decimals -3.4E38 to 3.4E38
Unsigned Char (Character type)	8 bits (One byte)	0 ~ 255
Unsigned Short (Short Integer)	16 bits (One character)	0 ~ 65535
Unsigned Int (Double Integer)	32 bits (Double characters)	0 ~ 4,294,967,295

There are generally several basic types of variables:

Usage Examples

1. Create new macro command: In this process you can name, group, and encrypt.

Comm View GE Project	File IDT Tool Setting Help			A 🕢 Options
in A ∰ B = = = = = = = = = = = = = = = = = =	Set Lamp Switch DataDisplay	Alarm Isolay - Generative Schedule & Author Isolay - Generative Schedule & Author		Video Time QRCode
Project 5 ×	NowMacro Save SaveAll Cut Cop		CompileAli MacroList InputAssist	e >
VerD8 UserSecurity SecuritySettings Ag UserSetting TaskSchedule GlobalControl Event/Alarm Ag AlarmSetting Monitor And Record AdamMedicine	MacroList ID MacroName iroup Description 1 Macro_1 No 3 2 Macro_2 No 4 New Coine Delete M	New Macro X Macro N Macro 3 Descripti Group: Not Used Throw Up to 15 characters	Input Assist	Con Screen Window Window(6) w Baik window Baik Window(1)
12) Sample 1 Macro Accipe Add Recipe Default Recipe Digital Signature Recovered brany Tr Textlib Recovered brany	Information Search for: • Replace wit Scope: All Maro • Search Input Assist Information Information Lin	Replace Replace All 🔹 🛪	G X	

2. Edit macro command

N	ewMacro Save		II Cut Coj		Undo Redo	10 • Font Size	Compile	CompileAll		ත් Macro
	croList			đ×	Macro_2					
ID	MacroName	irou	Description	articul	1 #inclu 2 3 int Ma	ie <macro.< td=""><td>h></td><td></td><td></td><td></td></macro.<>	h>			
	Macro_1	No			3 int Ma: 40(in()				
	Macro_2	No			5 //	Here to a	dd macro	code.		
				1	6 7 8 ret 9 }	urn CMD_C	9K <i>;</i>			

3. Command insertion:

圓 宏		— — — ×
	2 2 10 · 10 · 清译 全部编译 余部编译	会 1000 一 1000 1000 1000 1000 1000 1000 1
宏列表 日 🗙	2 * 宏指令名称 🔀	输入辅助 日
ID 安名 群组 描述 特殊 1 支.1 无 2 英国全谷歌 1 第二条	<pre>1 finclude <macro.h> 2 3 4 int MainMacro(OperSetting *oper) 5 € (7 // Here to add macro code. unsigned short A;</macro.h></pre>	 > 逻辑语句 > 这算符 > 交量声明 > 设备通明 > 设备通讯 > 读变量ReadVar -
信息		5
使用説明 2 PlcComState WriteVar(VarName, const void * WriteBuf) 参 数: VarName, @写入支量@ WriteBuf, 用来写入的数据 代码观谎 WriteVar(@速度@,8A); 输入辅助信息 信息列表 査扰替换		3 写入安量 工程安量 速度 4 写入的数据 今最 A 5

4. Compile after completion

LampSet Label	No. Action Execution	Action Description
Grahics Touching Ena Display Set		X Clear Recipe og Order Run

5. Off-line simulation or download for execution

16.2 Device Communication Function

Function Name	Description	Function Name	Description	Function Name	Description
ReadVar	Read	ReadArrayVar	Read one-	ReadArray2Var	Read 2D array

Function Name	Description	Function Name	Description	Function Name	Description
	variables		dimensional array variables		variables
WriteVar	Write variables	WriteArrayVar	Write one- dimensional array variables	WriteArray2Var	Write 2D array variables

Detailed description of function name:

D 117	
ReadVar	#include <macro.h> /*</macro.h>
	PlcComState ReadVar(VarName,void *ReadBuf) Read Variables
	Parameters:
	VarName, @ Read Variables @
	ReadBuf, Data used for reading
	Return value: Communication error code*/
	int Main()
	{
	//Here to add macro code.
	short A; // Declare A as a short integer variable float B; // Declare B as a floating-point variable
	char arr[10]= $\{0\}$;// Declare arr as a character array of length 10
	ReadVar(@ReadHexadecimalIntegers@,&A); //"ReadHexadecimalIntegers" is the name of the
	tag variable to be created
	ReadVar(@ReadSinglePrecisionFloatingPointNumbers@,&B);
	ReadVar(@ReadStringVariables @,&arr[0]);
	return CMD_OK;
WriteVar	<pre>#include <macro.h></macro.h></pre>
write var	/*
	PlcComState WriteVar(VarName,const void *WriteBuf) Write Variable
	Parameters:
	VarName, @ Write Variable @
	ReadBuf, Data used for writing
	Return value: Communication error code */
	int Main()
	//Here to add macro code. short A;// Declare A as a short integer variable
	float B;// Declare B as a floating-point variable
	char arr $[10]=\{0\}$;// Declare arr as a character array of length 10
	A=10;
	B=3.14;
	WriteVar(@WriteHexadecimalIntegers@,&A);// "WriteHexadecimalIntegers" is the name of the
	tag variable to be created
	WriteVar(@WriteSinglePrecisionFloatingPointNumbers @,&B); WriteVar(@WriteStringVariables@,&arr[0]);
	return CMD_OK;
	}
ReadArrayVar	<pre>#include <macro.h></macro.h></pre>
	/* Dia Com State Dead A mar Way (Von Name wint?) inder with *De-JDuft De-Jun and it was in the
	PlcComState ReadArrayVar(VarName,uint32 index,void *ReadBuf) Reading one-dimensional array variables
	Parameters:
	VarName, @Reading array variables@
	index, Array variable subscript
	ReadBuf, Data used for reading
	Return value: Communication error code */ int Main()

	<pre>//Here to add macro code. short arr[20]={0}; //Declare "arr" as a short array of length 20 short i=0;//Declare i as a short integer variable, initialize i to 0 for(;i<20;i++) </pre>
	ReadArrayVar(@FunctionReading20@,i,&arr[i]); // Read a 16- bit integer array variable with a length of 20 defined as "FunctionReading20" and place it in the arr array} return CMD_OK;
WriteArrayVar	#include <macro.h></macro.h>
	/* PlcComState ReadVar(VarName,uint32 index,void *WriteBuf) Write one-dimensional array variables Parameters: VarName, @ Read variables @ index, Index of array variables
	WriteBuf, Data used for writing Return value: Communication error code */ int Main() {
	<pre>//Here to add macro code. short arr[20]={0}; // Declare arr as a short array of length 20 short i = 0,k; // Declare i and k as short integer variables, where i is initialized to 0 for (;i<20;i++) {</pre>
	<pre>k=10*i+1; WriteArrayVar(@FunctionWriting20@,i,&k); // Write the k value of the loop calculation into a 16-bit integer array variable with a length of 20 defined as " FunctionWriting20" }</pre>
	return CMD_OK; }
ReadArray2Var	<pre>#include <macro.h> /* PlcComState ReadArray2Var(VarName,uint32 index1,uint32 index2,void *ReadBuf) Read real-time data of two-dimensional array variables Parameters: VarName, @Reading 2D array variables@ index1, Row subscripts of array variables</macro.h></pre>
	index2, Column subscripts of array variables ReadBuf, Data used for reading
	Return value: Communication error code
	int Main()
	//Here to add macro code. short arr[4][5]={0}; //Declare arr as a short array of length 20 short i=0,j=0;//Declare i, j as short integer variables, and initialize i to 0 for(;i<4;i++)
	<pre> for(;j<5;j++) { ReadArray2Var(@2DArrayReading20@,i,j,&arr[i][j]); // Read a 16-bit integer 2D array variable with a length of 4 * 5 and a definition name of </pre>
	"2DArrayReading20", and place it in the arr array } return CMD_OK;
WriteArray2Var	<pre>#include <macro.h></macro.h></pre>
	/* PlcComState WriteArray2Var(VarName,uint32 index1,uint32 index2,void *WriteBuf) Write real- time data for two-dimensional array variables Parameters:

```
VarName, @Read variables@
ReadBuf, Data used for reading
Return value: Communication error code
*/
int Main()
{
//Here to add macro code.
 short arr[4][5]={0}; //Declare arr as a short array of length 20
 short i = 0,j=0,k; //Declare i and k as short integer variables, where i is initialized to 0 for
(;i<4;i++)
  {
    for(; j < 5; j++)
     Ł
       k=10*j+i+1;
      }
   WriteArray2Var(@2DArrayWriting20@,i,j,&k);
    //Write the k value of the loop calculation into a 1- bit integer array variable with a length of 20
defined as "2DArrayWriting20"
return CMD_OK;
```

16.3 Macro Instruction Execution

- 1. Button execution
- 2. Window execution
- 3. Global control
- 4. Numerical input triggering
- 5. PLC control
- 6. Alarm triggering

16.4 Macro Instruction Examples

Example 1:

Extract and write the scanning string "PL01~Work0001~PG01~a123456" to the corresponding address

#include <macro.h>

#include <stdio.h>

int Myfun(char *str1,char *str2)// Define a function to replace~with a " space

{

```
while (*str1!='0')
```

```
{
    *str2=*str1;
if(*str2=='~')
    *str2='';
```

```
str1++;
str2++;
}
*str2='\0';
```

return 0;

}

```
int Main()
```

{

```
//Here to add macrocode.
```

char str1[200]="PL01~Work0001~PG01~a123456";//Define temporary data instead of scanned data

char str2[200]={0};

Myfun(str1,str2);

char arr1[10]={0};//Define temporary variable receiving workshop code

char arr2[10]={0};//Define temporary variable receiving work order number

char arr3[10]={0};//Define temporary variable receiving operation group

char arr4[10]={0};//Define temporary variable to receive product number

sscanf(str2,"%s %s %s %s",arr1,arr2,arr3,arr4);//Take out the corresponding array and place it in a temporary

variable

WriteVar(@workshop@,&arr1[0]);//Write the address data for storing workshop codes into defined variables WriteVar(@WorkOrder@,&arr2[0]);//Write the address data storing the work order code into the defined

variable

WriteVar(@ProductionProcesses @,&arr3[0]);//Write the address data of the stored process code into the

defined variable

WriteVar(@ProductID@,&arr4[0]);//Write the address data for storing product numbers into the defined variable return CMD_OK;

}

17 Recipe

Recipe data refers to the data stored inside the HMI and in an area that can be saved after power outage.

17.1 Introduction to Recipe

Recipes are collections of the same type of data with a fixed data structure. A recipe can contain multiple recipe data, which may differ in terms of data but are completely consistent in structure. At the same time, the recipe is stored in the "csv" file format in the project, with the storage path located in the "recipe" folder of the project root directory.

17.2 Recipe Setting

"Recipe Edit" is mainly used to set recipe attributes, and these data can be displayed using recipe components. Please refer to Chapter 8.7.5 : Recipe.

A project can be configured with up to 100 recipe groups, and each recipe can be configured with up to 1080 recipe items. There is no limit to recipe data.

1. In "Project" - "Recipe" window, double-click [Add Recipe] to add a recipe group. The "Recipe No" and "Recipe Name" columns in the recipe data table are created by default by the system and cannot be edited or bound to variables. The following is a description of the recipe group attributes.

Recipe Property Recipe Data	Recipe Group Name: Default Recipe					
	Recipe Edit	🔲 Bind stru	cture variable	Total length of recipe data		
	Recipe Item	Data Type		Bind Variable		
	Recipe No	unsigned int				
	Recipe Name	string				
	one	bool	MW0			
	two	bit	MBO			
	Add	1	elete Move l	Jp Move Down		

Recipe - Recipe Group Property Description				
Recipe Group Name	Set the current recipe group name			
Bind structure variable	If checked, all column items in the formula data table, except for [Recipe No] and [Recipe name], will be associated with structural variables. The number of associated recipe items is			
	determined by the number of structural variables			
Total length of recipe data	Display the total length of recipe data for the current recipe group			
Add	Add a new recipe item, click once to add a new line. It is valid when [Bind Structure Variable] is			

	not checked
Insert	Insert a recipe item. The position of the inserted recipe item is on the previous line of the currently selected recipe item. It is valid when [Bind Structure Variable] is not checked
Delete	Add the currently selected recipe item, which is valid when [Bind Structure Variable] is not checked
Move Up	Move the currently selected recipe item up
Move Down	Move down the currently selected recipe item
Current operation recipe serial number	Display the current operation recipe number using word variables
Total recipe number	Use word variables to display the total number of pre recipes
Current operating recipe name	Display the current operation recipe name using string variables

Note: The data type of the variable bound to the recipe item needs to be the same as the data type of the recipe item

2. In the Project-Recipe window, double click [Add Recipe] to add a recipe group. The following are descriptions of recipe data.

Recipe Edit					
Recipe Property	Create default	recipe data			
Recipe Data	Recipe No	Recipe Name	one	two	
	Add/Insert row	1 0	Move Up	Move Down	Move To Header
	Add	Insert Dele		Paste	Import
	•				
	Help Descri	otion		0	K Cancel

Recipe - Recipe group property description				
Create default recipe	Check to create a recipe data table based on the recipe table in the [Recipe Property] section			
data				
Add/Insert row	Set to increase the number of inserted rows			
Move Up	Move the currently selected row up			
Move Down	Move the currently selected row down			
Move To Header	Move the currently selected recipe data to the header			
Move To Footer	Move the currently selected recipe data to the end of the table			
Add	Add formula data, click once to add a new line			
Insert	Insert Recipe Data			
Delete	Delete the currently selected recipe data			

Сору	Copy the currently selected recipe data
Paste	Paste the currently selected recipe data
Import	Import the formula data table, and the format of the imported table must be consistent with the current formula data table format. Please note that the import will not overwrite the previously existing data
Export	Export the current recipe data table. The default file name for exporting is 【RecipeData】, which can also be named by oneself. The file format is 【'. xlsx'】, and the exported file is stored in the software installation directory.

18 Operation Log

The operation log can record the operations performed by the user on the HMI, and the user can save these operation records in CSV or PDF file format to external storage. To use the operation log, you need to first check [Enable OperationLog].

18.1 Enable Operation Log

1. In the " Oper Log" dialog box, corresponding properties can be set.

 Use Text Li Direct input 		Record Save D RecordRetentionReached: D Item operate log Expo			Value 0 1-N	Type Success Multi action er
Operation Rec Record	ord Item	Discription				
	关机 田户登录成功	Power on Power off User@1@ login succ	eerlert	1		
Export Reco	用占容寻生财	User@1@ login fa			E Langua	nannel Settings age Independer port time conta

2. In the "Operation status display" dialog box, you can set the content of the "Description" column item displayed on the HMI for the operation log component.

Value	Тур	oe 🖉	Description	Edit
1-N N	lulti actio	n error	1-N	
	D	🖥 Modify Ope	ration status Descrip	×
Export Char		Louis Statistics		d Han) *
The expo	Second Second	Content Save c	ontent to text lib	tLib
Use N	lame	successful		Nove Up
171				1.42
m		Save Conter	nt To	

	Operation Log - Operation Record Setting Instructions		
Language independent	Set the attributes of the record description. If checked, the selection box after [Current Language] is invalid. The component defaults to using the first language		
Use Text Lib	Set the attributes of the record description, check [Use Text Lib] to select the text library name in the corresponding area of the [Description] column in the operation record table		
Direct input	Set the attributes of the record description, check [Direct Input] to directly edit the description in the corresponding area of the [Description] column in the operation record table		
Record Save	Set the attributes to be retained in the exported operation log table, and the unit can be selected as "Days" or "Number of Items". When selecting 'Days', the minimum is 1 day and the maximum is 365 days; When selecting 'Number of items', minimum 1 item and maximum 100000 items		
Record Retention Reached	When the operation log reaches the "record retention" number, new data is recorded according to the set "record retention reached" method, including "delete the oldest record" and "no longer keep new records"		
Item operate log	Clicking on [Item Operate Log] will pop up a corresponding window, where you can configure the operation logs of components on all windows in the project, and choose whether to monitor variables and use a text library		
Operation Record Item	System operation record table, where @ 1 @ represents 1 change data, with a maximum of 8		

18.2 Export Record

1. In the "Export Record " dialog box, corresponding properties can be set.

Export Record		
Export Devices	HMI	•
Export subfolder	alarm	Use dynamic subfolder
Daily scheduled export	Export time	0 CHour: 0 Min
Trigger Export	Trigger Variable	
Trigger Type	Off->On	•
Start Time		End Time
Export File Format	CSV	 File Encryption
Password	8888888	Dynamic password
Export Data Sorting	Sorted by time a	ascending *
Export State		
Export State Explain:0: initi	al state, 1: export	successful, 2: no external memory, 3: write error

2. In the "Export Channel Settings" dialog box, corresponding properties can be set.

		ent Display Language tains milliseconds	English(Latin)	
Z Exp	ort title	🔹 Direct input	👶 Use	TextLib
Use	Name	Title Name Se	et 🗧	Move Up
V		No.		Move Down
V	日期	Date		Default Sort
V	时间	Time		
V	操作设备	Operation log	3	
V	元件窗口号	Operating equip	ment .	

	Oper Log – Export Record Instructions
Export Devices	Export and save operation log records to external storage devices
Use dynamic devices	Dynamically setting export devices using string variables
Export subfolder	Set the name of the sub folder for exporting operation log records. If the export is successful, the set sub folder name will be generated in the "tar" folder of the project root directory. The
	operation log records will be recorded in the sub folder. If this item is blank, the operation log records will be saved in the "tar" folder of the project root directory by default
Use dynamic	Using string variables to dynamically set sub folder names

subfolder	
Daily scheduled	Set export time and regularly export operation log records every day
export	
Trigger Export	Triggering export operation log records through the status of bit variables
Trigger Type	Set the triggering method for triggering export bit variables
Start Time	Set the start time for export
End Time	Set the end time for export
Export File Format	Set the file format for export operation log records, including CSV and PDF
File encryption	If checked, the exported file format is a compressed package, and a password is required to
	successfully extract the file. If 【File Encryption】 is not checked, the exported file format is set
	in the 【Export File Format】 option, and you can open the file directly
Dynamic password	Use string variables to dynamically set the password for file encryption, which is valid when
	[File Encryption] is checked
Export Data Sorting	Set the sorting method for exported data, including two options: "Sort by time ascending order"
	and "Sort by time descending order"
Export State	Reflect the exported state through the value of the word variable. 0 indicates the initial state, 1
	indicates successful export, 2 indicates no external memory and 3 indicates a write error

	Oper Log - Export Channel Setting Description						
Language	If checked, the selection box after [Display Language] is invalid, and the component defaults						
independent	to using the first language						
Display Language	Set the language of the title bar, which is valid when [Language Independent] is not checked						
The export time	If checked, the time in the exported operation log record includes milliseconds						
contains milliseconds							
Export Title	If checked, the exported operation log record includes a title bar, which is checked by default						
Direct input	The "Title Name Set" column in the "Export Channel Setting" table can use direct input to						
	modify the title block name						
Use Text Lib	The "Title Name Set" column item in the "Export Channel Setting" data table can use a text						
	library						
Move Up	Move the currently selected row up						
Move Down	Move the currently selected row down						
Default Sort	Restore to the original sorting of the data table						

18.3 Operation Log Display

After enabling operation logs, event components can be used to visually display the content of the operation logs

1	Evt property	Event type: Current event History event	
1	Table property Display Set	Event show: Operator log	
1		Sort type: O Ascending by time • Descending by time	
1		List Display set	
		Show title bar Title font set List font same as	st
		Preset text set: 🔸 Input direct 💿 Use Text lib Display languag Chi	ine
e		🗾 Data column dynamic show 🦳 🥼 (tip: bit0 is O)ff
ic		🖉 Dynamic set by column	

Offline simulation effect:

No.	Туре	Date	Time	Device	Window	Element	Status	Description	User	Permission
						_				

19 Electronic Signature

Electronic(Digital) signature can only be operated with signature authorization when manipulating variable controls. In response to changes in data values, signature authorization can set up to two levels of confirmation (operator and verifier), and electronic signature information is included in the operation log. After checking Enable electronic signature, you can see the relevant settings for electronic signature under its basic properties when using numerical components.

1. Enable electronic signature function:

SWILCIV	ugni	NUTIVUTIAL AIAI	un l		information	
Oper Log	Dr B_1	Basic Window(1)	Dr Electronic	: Signature 🗖	Dr UserSetting 🖸	
Enbale el	ectronic signa	ture				
Save elec	ctronic signati	ire record Record Sav	ve Days -	7 C Reco	rdRetentionReached:	Delete oldest record
redefined	i notes table					
Operator	notes			Verifier notes		
No.		Predefined note		No.	Predefined	i note
1		1672373844		1		
2		下载配方		2	确认下载	配方
3		上传配方		3	确认上传	配方
Add	Delete	Move up M	ove down	Add	Delete Mov	e up Move down
ignature	Туре					
14-1	Туре	Description	Edit			
Value						
Value						

	Electronic signature setting instructions						
Enable electronic	This function	can only be used	after checking it. It is not checked by default				
signature	Note: This function is not support G2 series HMI						
		Days	Electronic signature records are saved by days, with a default of 7				
	Record Save	Days	days and a maximum of 365 days allowed				
		Number	Electronic signature records are saved by number of entries, with a				
Save electronic			default of 10000 entries and a maximum of 100000 entries				
signature record	Record Retention Reached	Delete oldest	After reaching the set number of days or pieces to save, delete the				
		record	earliest saved record and continue saving new records				
		Not save new	Do not continue saving after reaching the set number of days or				
		records	entries				
Operator notes	Add, delete, and move as needed (system operation window 40005)						
Verifier notes	Add, delete, a	and move as neede	d (system operation window 40006)				
Signature Type	Operation/ve	rification commen	ts can be edited and modified				

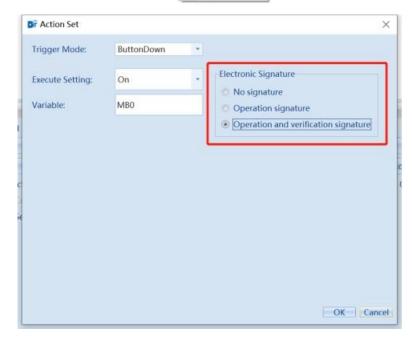
2. UserAuthorInfo

JserNumber	st : 2	UserAuthorInfo Set initial status is e	enable 📕 HideUser
ID	UserName	UserName:	User1
1	User1	Password:	88888888
2	User2	LogoutTime(minutes): GroupName:	10 : (0 indicate never logout) admin •

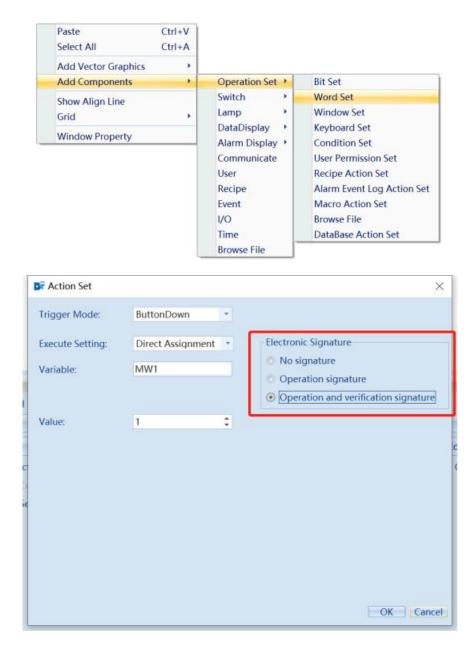
3. Use bit/word components to set electronic signatures: Electronic signatures support "switch component" - bit set/multi state setting and numerical components.

Bit set:

	Ctrl+V Ctrl+A			
Add Vector Graphics				
Add Components		Operation Set		Bit Set
Show Align Line Grid		Switch Lamp DataDisplay	*	Word Set Window Set Keyboard Set
Window Property		Alarm Display Communicate User Recipe Event I/O Time	•	Condition Set User Permission Set Recipe Action Set Alarm Event Log Action Set Macro Action Set Browse File DataBase Action Set
		Browse File	1	Extension and the second s



Multi state set:





Base Property Numerica	Operator Property: 👩 Numeric 🔹 Numeric Input 🌀 CharSet 👩 CharSet Input
Grahics	Display Property
Font	Password Display
Display Set	
KeyBoard Sett	Read/Write same address
Touching Ena	Read/Write: MW7 New
	Electronic Signature
	💿 No signature
	Operation signature
	Operation and verification signature

20 Resource Library

To save frequently used images, fonts, languages, text, etc. for quick and repeated use.

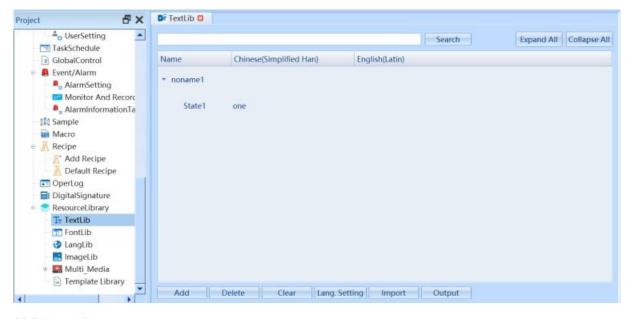
20.1 Text Library

As shown in the following figure, it is the text library (menu bar – Project - ResourceLibrary - TextLib), which can achieve quick editing.

When you need to edit a large amount of text content in a text library, you can use the **[**Export**]** function to export the text library to a designated location on a PC, and then use Excel to complete the editing work. This not only facilitates editing operations, but also saves a lot of time. After editing, use the **[**Import**]** function to import the table into the text library for easy use.

When there is no need for a large batch of text libraries, you can directly add, delete, or empty them

The text library is displayed in different languages, and text content in different languages can be set. Where the text library is used in the component, the text library can also be set, and the settings will be synchronized to the text library.



20.2 Font Library

As shown in the following figure, the font library is used to add font templates and quickly set fonts. At the font property of the component, you can click "Import Font Template" to use the font library, or you can click "Save to Font Library" to save the font template set in the component to the font library for reuse.

📥 UserSetting	Font templa	ate list	Font Property
TaskSchedule	1000	72575	Family: Nirmala Ul Semilight 💦 🖬 Colo 🔹 📝
GlobalControl	ID	Font	Size: 16 - B I U Char spac 0 ‡
📕 Event/Alarm	1 Font1	Nirmala Ul Semilight 16	
AlarmSetting			and a subsection of the section of t
Monitor And Record			Shadow
AlarmInformationTa			Nirmala UI Semilight Color Color
000 Sample			Offset: 10 4 0 V: 4 0
🖬 Macro			
🕂 Recipe			
Add Recipe			
📈 Default Recipe			
🔄 OperLog			
📄 DigitalSignature			
📚 ResourceLibrary			
- Tr TextLib			
FontLib			
🚱 LangLib			
🛃 ImageLib			
🔹 🎆 Multi Media			

20.3 Language Library

The language library shown in the following figure is used to set the language. The language library supports a maximum of 32 languages. Changing the number of languages will also modify the number of languages used in other places. It can also be used in conjunction with a font library, where font templates can be imported and font attributes can be saved to the font library.

Project 🗗 🗙	Dr Te	extLib 🖾 🛛 🗗	FontLib	📑 LangLib 🖾	
UserSetting		guage Setting guage Num:	3		\$
 Event/Alarm AlarmSetting 	ID 1	Chinese(Simpl	LangN	lame	
Monitor And Record	2	English(Latin)	inea riany		
 □ Sample □ Macro □ Mecipe □ Arcipe 	3	Turkish			
OperLog DigitalSignature SesourceLibrary Tr TextLib Tr FontLib					
CangLib LangLib ImageLib * Multi_Media Demplate Library					

20.4 Image Library

As shown in the following figure, the image library can be pre imported, or newly created and saved, and can be reused.

oject 🗗	×	Dr TextLib 🖸 Dr FontLib 🖬 Dr	F LangLib 🖸 🛛 🗖 Graphics lib preview 🖸	
≜ _o UserSetting	-	Grpahcis lib preview		
TaskSchedule		button-b-01.vg		State: 0 * Size(160x40)
 GlobalControl Event/Alarm 		Project Graphics Lib:		State Preview:
 AlarmSetting Monitor And Record AlarmInformationT Sample Macro Add Recipe Add Recipe Default Recipe Default Recipe DigitalSignature ResourceLibrary Tr TextLib FontLib Canglib 		button button b key101 warnin	putton k_butto k_frame k_lamp	State:0 State:1
🔣 ImageLib		1		
👻 🎆 Multi_Media		Import Graphics	Add Graphics	Edit Graphics
 Template Library 	1	Batch Import Picture	Delete	Import Picture

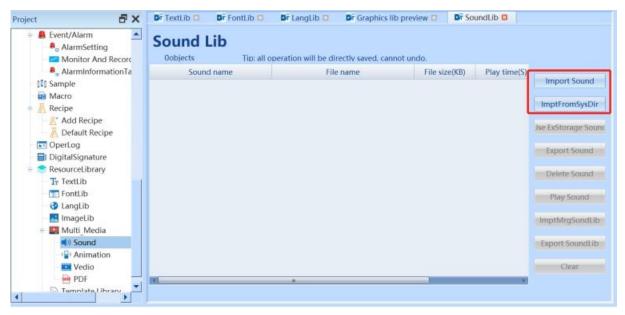
	Image Library Description
Import Graphics	Import System Library for Use
Add Graphics	Establish external graphic usage
Edit Graphics	Edit the currently selected image
Batch Import Picture	Batch import of external image libraries for use
Delete	Delete the selected graphic, this operation is not recoverable
Import Picture	You can import one or more external images. If multiple images are selected, the imported image is a multi-state graph

20.5 Multimedia

20.5.1 Sound

You can import sound, display specific information about the sound, or export sound from the sound library for deletion,

playback, and other operations.



20.5.2 Animation

20.5.3 Video

20.5.4 PDF

20.6 Template Library

20.6.1 Introduction to Template Library

It can meet the setting needs of personalized components/controls for users who have used them multiple times, saving the time for configuration. After setting parameters for individual/multiple components according to requirements, they can be added to the template library and can be called at any time. When changing the computer/software installation directory, you can export the original template library and then import it.

Special convenience features such as:

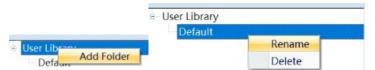
1. After a switch component - macro action (macro contains Modbus device External variable) is added to the template library, the new project calls this element, which can automatically configure the PLC device and create this macro, and the macro code is also retained.

2. After adding a switch component - recipe action to the template library, the new project calls this component to automatically add a recipe.

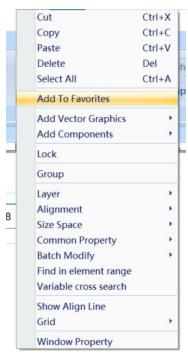
In summary, the template library can be directly and conveniently used by users.

20.6.2 Template Library Setting

1. Right click on the User Library - Add Folder and Rename it



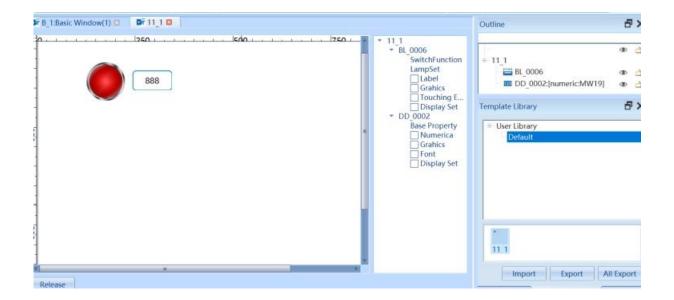
2. Select the desired single/multiple components and right-click on 'Add to Favorites'



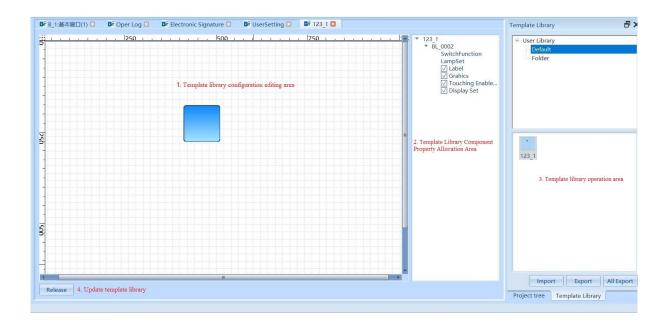
📑 Add To Fa	vorites		×
Name:	11		
User Library:	Default 🔹		
ОК	Cance	el	

3. After adding to favorite, the version number "_1" will be automatically added after the library name, and you will enter the template library editing interface.

Template Library	₽×
e-User Library Default	
11 1	
Import Export All Project tree Template Library	Export



Define Pro	perties for Published Type Versions.
public attrib	on will be published for the selected type, and utes will be assigned to the selected type or specified attributes will be confirmed.
Type name:	11
Version:	2
Author:	
Notes:	
option:	
	Update instances in the project
	Remove unused type versions from the library

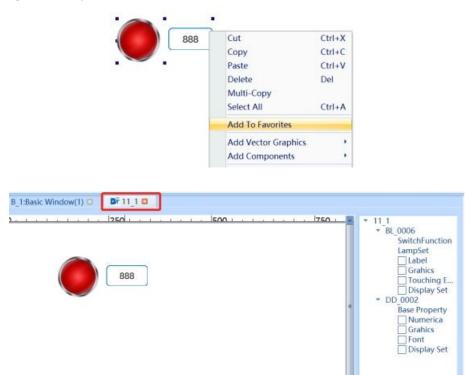


	Template Library Editing Interface Setting Description
1. Template library	Like the basic window, components can be added or removed, and parameters can be set for
configuration editing area	components
2. Template Library	Assign attributes to each component in the template library configuration screen one by one,
Component Property	without checking them by default.
Allocation Area	Checked attributes can only be visible when the basic window calls this template library after
	the template library version is saved and updated, and when the component attribute
	configuration is double clicked. It can be understood that the checked attributes are provided
	for users to flexibly modify, while the unchecked attributes are updated in bulk with the
	template library. Please refer to the template library instance demonstration for details.
	Note: For checked attributes, as long as the user has modified these attributes when calling the
	library in the basic window, after updating the template library, these attributes will not be
	updated with the template library update, only unchecked attributes will be updated. If the
	selected attribute has not been modified by the user in the basic window, it will also be
	updated with the template library update.
3. Template library	You can modify the name of the template library, enter the editing interface, delete, import,
operation area	and export operations

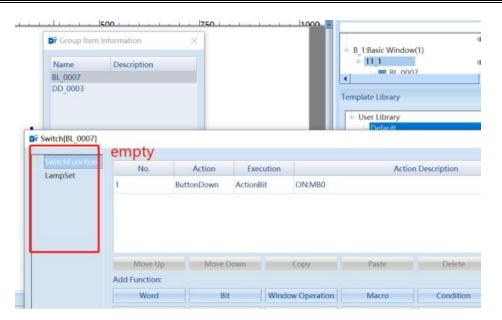
4. Update template library	•	Click "Release" at the bottom left to pop up the update template library interface for
		update operations
	•	Version: When updating, the version number will be automatically+1, and it can also be
		modified to any other version
	•	Author and comments: You can add information about the author and comments
	•	Options
	•	Update instances in the project: After checking, the components calling this template
		library in the basic window will batch update the settings of unchecked attributes in the
		synchronized template library
	•	Remove unused type versions from the library: If checked, the template library styles
		that have not been called in the library will be deleted

20.6.3 Template library instance demonstration

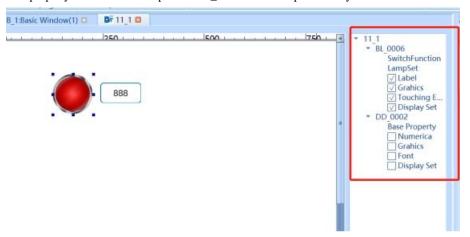
1. Select the component and right-click to add it as a favorite.



2. At this point, if the template library component property is not checked, then double clicking on the component property in the basic window will result in no property options being visible.



3. Assign the 'Label' property to the switch component 'SB_0004' in the template library.



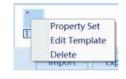
4. Click the "Release" button at the bottom left to update the instance. If "Remove unused type versions from the library" is checked, the template library "Style a1" will be deleted.

Define Pro	perties for Published Type Versions.
public attrib	on will be published for the selected type, and utes will be assigned to the selected type or specified attributes will be confirmed.
Type name:	11
Version:	3
Author:	
Notes:	
option:	
	Update instances in the project
	Remove unused type versions from the librar

Di Group Item I	nformation	×		_
Name BL_0008 DD_0004	Description			
witchFunction ampSet abel Grahics Fouching Ena Display Set	No. 1	Action ButtonDown	Execution ActionBit	n ON:MB0
	Move Up Add Function:	Move	Down	Сору
	Word	Bi	t Wi	ndow Operatio

5. After the update, the template library editing interface will automatically close and return to the configuration basic window. At this time, by viewing the switch component properties, you can see that the "label" attribute appears.

6. At this point, the "Label" attribute of the component will not be modified. Right click on the template library and click "Modify" to enter the template library editing interface. Edit the "Label" attribute of the component with the content of "1".

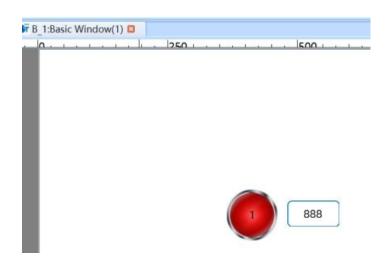


SwitchFunction	✓ UseLabel	Label List
LampSet	Text Edit	ID Content
Label	Language Independent	
Grahics	Current Language: Chinese(Simplified Han) +	
Touching Ena	🙄 Use Text Lib	2
Display Set	Direct input	
	Content	Display Setting
	Save content to text lib	Auto Extend By Content
	1	Label Position
		🔚 Set Label Position By Language Or State
	Save Content To	Horizonta = ++ =
	All state All language All	Vertical: F + 1
	Font Property	C Walking Lantern
	Import Font Template Save to Font Lib	
	Family: 阿里巴巴普惠体 2.0 55 Regular - Color - 📝	
	Size: 16 * B I U Char spac 0 *	
	Multi-line alignment: 🔳 👅 📲 Line spac 0 🛟	
	C Shadow	
	阿里巴巴普惠体 2.0 55 Regular Color ▼ 2 0000 × 2 4 5 1 4 5	
	Copy Current Font Property To	
	All State All Language All	

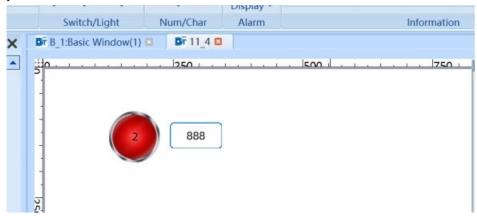
7. Click on the "Release" button at the bottom left to update the instance.

	 Prelease Type Version × Define Properties for Published Type Versions. A new version will be published for the selected type, and public attributes will be assigned to the selected type or the system specified attributes will be confirmed. 	3 8 0
- · · · · · · · · · · · · · · · · · · ·	Type name: 11 Version: 4 Author: Notes:	C
	option: Update instances in the project Remove unused type versions from the librar OK Cancel	
Release		

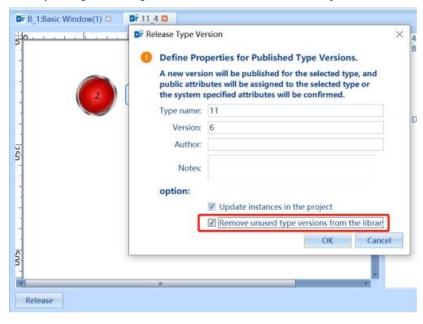
8. At this point, returning to the basic window, you can see that the attributes of the component label have also been updated.



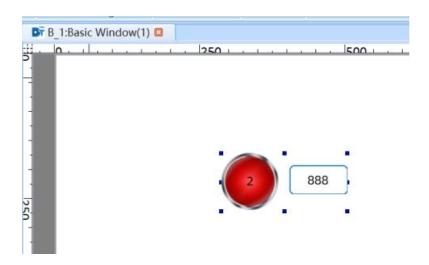
9. Now, modify the "Label" attribute content to "2".



10. Enter the template library editing interface again and click the "Release" button to update the instance.



11. Returning to the basic window interface, you can see that the "label" attribute content of the component has not been modified with the template library update.



12. Reference the Template Library

Select the template library to be called

Hold down the left mouse button, move to the basic window, release the mouse button, and the template library components will be placed in the basic window.

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		++++	



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