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## Chapter 1 SmartManager Pro Installation

This section describes how to install SmartManager Pro.

### 1.1 , installation environment requirements

Software Source.

Go to the Amoxon website at [http://www.amsamotion.com/show\\_450.html](http://www.amsamotion.com/show_450.html) 下载软件 (language versions include Simplified Chinese and English).

Operating system .

Windows® 7 SP1 (32bit /  
64bit) Windows® 8 (32bit /  
64bit) Windows® 8.1 (32bit /  
64bit) Windows® 10 (32bit /  
64bit)

### 1.2 , installation steps

1. After downloading the EasyBuilder Pro installation file from the official website, double click to open it and click [Next].



2. Select the installation path and tap [Next].



3. Just click Install.



## Chapter 2 Hardware Introduction

This section introduces hardware-related information

### 2.1 , AMX-MT043C/AMX-MT043IE

4.3 inch HMI technical specifications		
Category	Indicators	Detailed parameters
Show	LCD size	4.3" TFT
	High Resolution	480*272
	LCD brightness	400
	High Contrast	500:1
	Backlight Type	LED
	Backlight life	> 30,000 hours
	Display color	16.7M
	Visibility range	80/80/80/80
Touch	Touch Type	4-wire resistive type
	Touch accuracy	Action area Length (X) $\pm 2\%$ ; Width (Y) $\pm 2\%$
Storage	Flash memory (FLASH)	128MB
	Memory (RAM)	128MB
Processor		ARM Cortex-A7 single-core 1GHz
Communication Interface	USB Host	USB 2.0*1
	RS-232	COM1
	RS-485	COM2: 2W/4W; COM3: 2W
	Ethernet	AMX-MT043IE: 10/100Mbps Adaptive
Perpetual Calendar		System built-in
Power supply	Input power	9-36 $\pm 10\%$ VDC
	Power consumption	260mA@24VDC
	Power supply isolation	Built-in
	Voltage resistance	500VAC (1 minute)
	Insulation resistance	Over 50M $\Omega$ @500VDC

Specific ation	Dimension	128*102*36mm
	Hole size	120*94mm
	Installation method	Panel Mounting
	Weight of the whole machine	Approx. 0.5Kg
	Housing material	Engineering Plastics
	Mechanical vibration	10to25Hz (X, Y, Z axial 2G 30min)
Operatin g Environm ent	Protection level	Panel: IP65; Back cover: IP20
	Operating ambient temperature	0-50°C (32°-122°F)
	Use of environmental humidity	10%-90% (non-condensing)
	Storage environment temperature	-20-60°C (-4° to 144°F)
Certifi cation	CE	Conforms to CE marking standards
Softw are	PC Software	<b>Smart Manager</b> PRO V2.02 or higher

## 2.2 , AMX-MT07C/AMX-MT070IE

7 inch high resolution HMI technical specifications		
Category	Indicators	Detailed parameters
Show	LCD size	7" TFT
	High Resolution	800*480
	LCD brightness	400
	High Contrast	500:1
	Backlight Type	LED
	Backlight life	> 30,000 hours
	Display color	16.7M
	Visibility range	80/80/80/80
Touch	Touch Type	4-wire resistive type
	Touch accuracy	Action area Length (X) $\pm 2\%$ ; Width (Y) $\pm 2\%$
Storage	Flash memory (FLASH)	128MB
	Memory (RAM)	128MB
Processor		ARM Cortex-A7 single-core 1GHz
Communication Interface	USB Host	USB 2.0*1
	RS-232	COM1
	RS-485	COM2: 2W/4W; COM3: 2W
	Ethernet	AMX-MT070IE: 10/100Mbps Adaptive
	4G Remote	Scalable
Perpetual Calendar		System built-in
Power supply	Input power	9-36 $\pm 10\%$ VDC
	Power consumption	420mA@24VDC
	Power supply isolation	Built-in
	Voltage resistance	500VAC (1 minute)
	Insulation resistance	Over 50M $\Omega$ @500VDC
	Dimension	202*165*43mm



<b>Specific ation</b>	Hole size	192*138mm
	Installation method	Panel Mounting
	Weight of the whole machine	Approx. 0.8Kg
	Housing material	Engineering Plastics
	Mechanical vibration	10to25Hz (X, Y, Z axial 2G 30min)
<b>Operatin g Environm ent</b>	Protection level	Panel: IP65; Back cover: IP20
	Operating ambient temperature	0-50°C (32°-122°F)
	Use of environmental humidity	10%-90% (non-condensing)
	Storage environment temperature	-20-60°C (-4° to 144°F)
<b>Certi cation</b>	CE	Conforms to CE marking standards
<b>Softw are</b>	PC Software	<b>Smart Manager PRO V2.02 or higher</b>

2.3 , AMX-MT102C/AMX-MT102IE

10.1 inch high resolution HMI technical specifications		
Category	Indicators	Detailed parameters
Show	LCD size	10.1" TFT
	High Resolution	1024*600
	LCD brightness	350
	High Contrast	500:1
	Backlight Type	LED
	Backlight life	> 50,000 hours
	Display color	16.7M
	Visibility range	80/80/80/80
Touch	Touch Type	4-wire resistive type
	Touch accuracy	Action area Length (X) $\pm 2\%$ ; Width (Y) $\pm 2\%$
Storage	Flash memory (FLASH)	128MB
	Memory (RAM)	128MB
Processor		ARM Cortex-A7 single-core 1GHz
Communication Interface	USB Host	USB 2.0*1
	RS-232	COM1
	RS-485	COM2: 2W/4W; COM3: 2W
	Ethernet	AMX-MT102IE: 10/100Mbps Adaptive
	4G Remote	Scalable
Perpetual Calendar		System built-in
Power supply	Input power	9-36 $\pm 10\%$ VDC
	Power consumption	620mA@24VDC
	Power supply isolation	Built-in
	Voltage resistance	500VAC (1 minute)
	Insulation resistance	Over 50M $\Omega$ @500VDC
	Dimension	272*215*43mm

<b>Specific ation</b>	Hole size	260*202mm
	Installation method	Panel Mounting
	Weight of the whole machine	Approx. 1.2Kg
	Housing material	Engineering Plastics
	Mechanical vibration	10to25Hz (X, Y, Z axial 2G 30min)
<b>Operatin g Environm ent</b>	Protection level	Panel: IP65; Back cover: IP20
	Operating ambient temperature	0-50°C (32°-122°F)
	Use of environmental humidity	10%-90% (non-condensing)
	Storage environment temperature	-20-60°C (-4° to 144°F)
<b>Certi fication</b>	CE	Conforms to CE marking standards
<b>Softw are</b>	PC Software	<b>Smart Manager PRO V2.02 or higher</b>

## 2.4 Software model and touch screen model comparison table

Software Model	Touch Screen Model
MR0501NN	AMX-MT043C
MR0501NE	AMX-MT043IE
MR0701NN	AMX-MT07C
MR0701NE	AMX-MT070IE
MR1001NN	AMX-MT102C
MR1001NE	AMX-MT102IE

# Chapter 3 Hardware Setup

This section describes the hardware-related settings

## 3.1 , Screen touch correction

The system provides the following ways to call the screen touch correction function.

- When the HMI starts, after the start page appears, press and hold the screen for 12 seconds to call the touch correction function.

When entering the touch calibration mode, a + symbol will appear on the screen. Use the stylus or your finger to tap the center of this + for a five-point calibration.



### 3.2 , communication port pin definition

#### AMX-MT043C/AMX-MT043IE

Male head

Pin#	Symbol	COM 2 [RS-485] 2W	COM 2 [RS-485] 4W	COM 1 [RS-232]	COM 3 [RS-485] 2W
1	Rx-	Data-(B)	Rx-		
2	Rx+	Data+(A)	Rx+		
3	Tx-		Tx-		
4	Tx+		Tx+		
5	GND	Signal Ground			
6	TxD			Transmitted Data	
7	Data-				Data-(B)
8	Data+				Data+(A)
9	RxD			Received Data	

Note: 1. **COM 2 [RS-485] 2W** and **COM 2 [RS-485] 4W** work at the same time, but only one connection method can be used at the same time.

#### AMX-MT07C/AMX-MT070IE/AMX-MT102C/AMX-MT102IE

Male

Pin#	Symbol	COM 1 [RS-232]	COM 3 [RS-232]
1			
2	RxD	Received Data	
3	TxD	Transmitted Data	
4			
5	GND	Signal Ground	
6			
7	RTS		Transmitted Data
8	CTS		Received Data
9	GND	Signal Ground	

Female head

Pin#	Symbol	COM 2 [RS-485] 2W	COM 2 [RS-485] 4W	COM 3 [RS-485] 2W
1	Rx-	Data-(B)	Rx-	
2	Rx+	Data+(A)	Rx+	
3	Tx-		Tx-	
4	Tx+		Tx+	
5	GND	Signal Ground		
6	Data-			Data-(B)
7				
8				
9	Data+			Data+(A)

Note: 1. **COM 2 [RS-485] 2W** and **COM 2 [RS-485] 4W** work at the same time, but only one connection method can be used at the same time.

2. **COM 3 [RS-485]** and **COM 3 [RS-232]** work at the same time, but only one connection

method can be used at the same time.

### 3.3 , System Reset

If you inadvertently forget the system setup password for the HMI, restart and press and hold the screen for 12 seconds.

At this time the HMI will enter the touch calibration mode, after the touch calibration is completed the system appears two setting buttons: clear project file & run project file



**Note: Since clearing the project file will clear the project file and history data in HMI, you need to download the project to HMI again, and the system password will be restored to 1111111.**

### 3.4 , system settings

To access the HMI system settings, please enter the correct password first, the factory preset password is 111111.



#### Network

Before connecting to the HMI using Ethernet, the IP address of the operating HMI must be set correctly.

When [Obtain IP address automatically] is checked, the IP address of the HMI is automatically assigned by the DHCP of the domain where it is located, if [Use the following IP address] is checked, you need to enter the IP address and other domain information manually





## Time, date

Set the date and time within the HMI system.

The screenshot shows the '时间/日期' (Time/Date) configuration screen within the HMI software. The interface includes a tabbed menu at the top with options: '网络' (Network), '时间/日期' (Time/Date), '安全' (Security), '历史' (History), and 'HMI名称' (HMI Name). The '时间/日期' tab is active. The main area contains digital displays for year, month, day, and week, each with up and down arrow buttons for adjustment. The year is set to 2022, month to 4, day to 27, and the week to 3. Below these, the time is displayed with hours (15), minutes (48), and seconds (10), also featuring up and down arrow buttons. At the bottom, there are five buttons: '上一页' (Previous Page), '下一页' (Next Page), '取消' (Cancel), '应用' (Apply), and 'OK'.

## Security

The system provides strict file protection and requires the correct password before uploading/downloading files

The screenshot shows the '安全' (Security) configuration screen within the HMI software. The interface features the same tabbed menu as the previous screen, with '安全' (Security) being the active tab. The main area contains four large, rectangular buttons stacked vertically, labeled: '本机系统密码' (Local System Password), '上传密码' (Upload Password), '下载密码' (Download Password), and '上传历史文件及FTP密码' (Upload History Files and FTP Password). At the bottom, there are five buttons: '上一页' (Previous Page), '下一页' (Next Page), '取消' (Cancel), '应用' (Apply), and 'OK'.

## History

Clear historical data records that exist in the system

The screenshot shows the 'History' tab selected in the top navigation bar. The main content area contains four checkboxes, each with a label: '清除配方' (Clear Recipe), '清除操作记录' (Clear Operation Record), '清除事件记录' (Clear Event Record), and '清除资料取样记录' (Clear Material Sampling Record). Below these checkboxes is a '清除' (Clear) button. At the bottom of the window, there are five buttons: '上一页' (Previous Page), '下一页' (Next Page), '取消' (Cancel), '应用' (Apply), and 'OK'.

## HIM Name

When you set the HMI name to facilitate the management of multiple HMIs at the same time, it is no longer necessary to record the HMI IP address.

The screenshot shows the 'HMI Name' tab selected in the top navigation bar. The main content area contains a label 'HMI名称:' followed by a text input field containing the value 'HMI\_C06A'. At the bottom of the window, there are five buttons: '上一页' (Previous Page), '下一页' (Next Page), '取消' (Cancel), '应用' (Apply), and 'OK'.

## OS Settings

Update OS version with vertical display mode enabled.



The screenshot shows the 'OS设置' (OS Settings) tab selected. The menu includes a '更新' (Update) button, a '更新系统文件' (Update system files) button, and a '显示角度 (垂直模式)' (Display angle (vertical mode)) section. This section has four radio button options: 0, 90, 180, and 270. The '0' option is selected. Below these options, a red text message states: '此设置将会在下次HMI重启后生效' (This setting will take effect after the next HMI restart). At the bottom, there are navigation buttons: '上一页' (Previous page), '下一页' (Next page), '取消' (Cancel), '应用' (Apply), and 'OK'.

## Other settings1

The brightness of the LCD screen can be adjusted using the knob on the screen.



The screenshot shows the '其他设置1' (Other settings1) tab selected. The menu includes a '背光' (Backlight) section with a '亮度调节' (Brightness adjustment) slider. Below this is a '下载设置' (Download settings) section with two checked checkboxes: '弹出下载窗口' (Pop up download window) and '下载/上传后自动重启' (Auto restart after download/upload). At the bottom, there are navigation buttons: '上一页' (Previous page), '下一页' (Next page), '取消' (Cancel), '应用' (Apply), and 'OK'.

## Other settings2

Set whether to hide the mouse cursor, and modify the HMI port number.

MI名称 OS设置 其他设置1 其他设置2

☐ 隐藏鼠标光标

☐ 在触控校准模式中启用选项;初始化HMI

☐ 允许 FTP 客户端修改U盘/SD卡数据

☒ 启用键盘按键声音

修改 HMI 端口号

上一页 下一页 取消 应用 OK

## Language

Setting the system language

OS设置 其他设置1 其他设置2 语言

☐ English

☐ 日本語

☒ 中文 (简体)

☐ 中文 (繁体)

上一页 下一页 取消 应用 OK

### 3.5 , System Settings column

After starting HMI, you can use the system setting column at the bottom of the screen to make system related settings, normally it is automatically hidden, users only need to tap the bottom right arrow to bring up the system setting column.

Click on each of the following illustrations to view detailed descriptions.



1. Enter the correct password to access the HMI system settings.
2. Enter the correct password to access the HMI system settings. Tap System Setup to view details. Enter the correct password to enter the HMI system settings. Tap System Settings to view detailed information. Displays network information, including HMI IP address and domain related information. Display HMI model and OS version information.
3. Use large keyboard for text message input
4. Use the keypad for numeric message input

## Chapter 4 Quick Start

This section introduces the New Project Quick Start

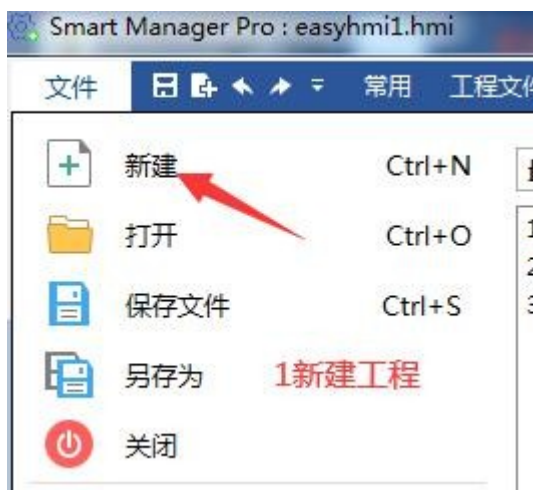
### 4.1 , Quick Build Project

A project file can be created in 6 simple steps.

1. New Project: Select New from the File menu and select the appropriate HMI model as the edit screen.
2. Add Device: Tap Add Device and set the device type, interface type, communication parameters and communication port.
3. Design program: Create the window and place the required components.
4. Save and compile the program: each project file before downloading to the HMI.
5. Simulate the program and verify the operation: In order to avoid the procedure of downloading the program to HMI several times during the modification stage to verify the correctness of the operation, which would waste too much time, SmartManager provides 2 types of simulation: online simulation / offline simulation.
6. Download the program to the HMI: Downloading is the last step and the HMI is ready to execute your carefully designed program.

### 4.2 Example of S7-200 connection

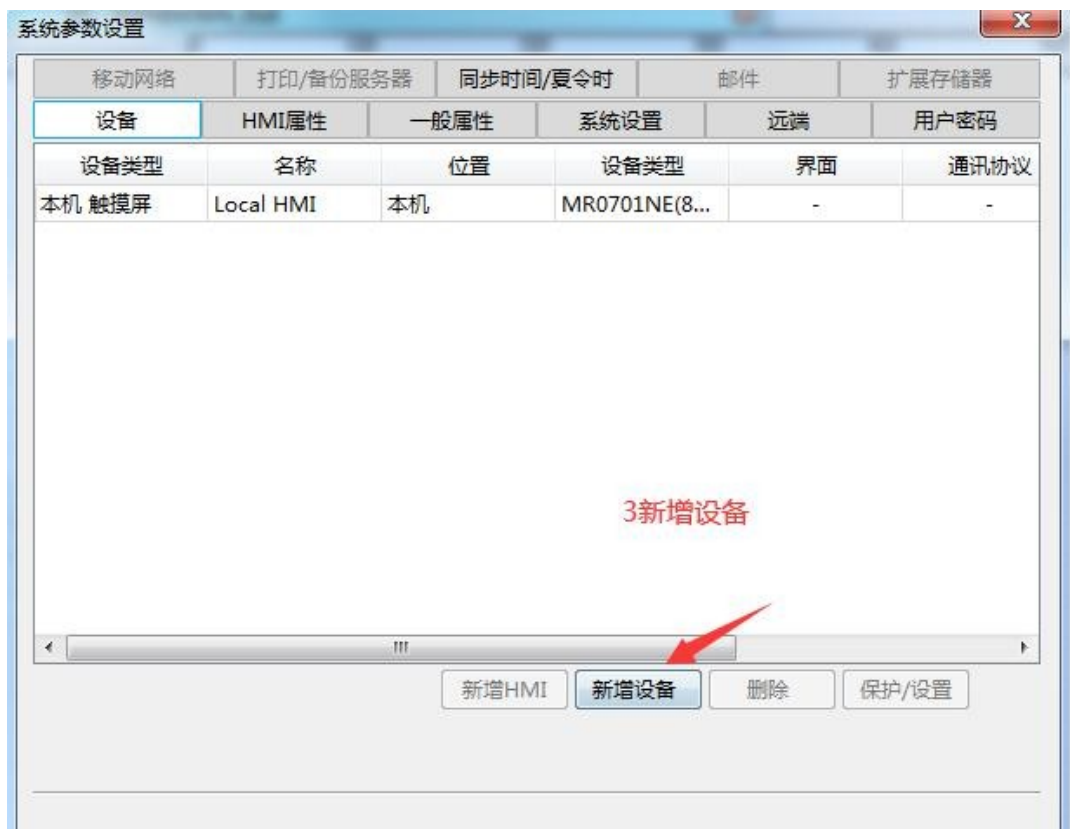
1.



2.



3.



4.

设备属性

名称: Siemens S7-200 PPI

设备

所在位置: 本机 设置...

\*若设备连接至本机的HMI, 请选择“本机”; 若连接到其他的HMI, 请选择“远端”。

设备类型: Siemens AG  
Siemens S7-200 PPI 地址配置

接口类型: 串口 设备连接手册...

\*于HMI上支持离线模拟(使用LB-12358)  
\*于穿透模式下可同时支持HMI于设备间的通讯  
\*于穿透模式下可设LW-9903为2来提升上传/下载设备程序的速度

COM: COM2(9600,Even,8 Bits,1 Bit) 设置...

设备预设站号: 2

☐ 预设站号使用站号变量  
☐ 使用广播命令  
[如何在元件地址中指定站号?...](#)

地址整段间隔(words): 5  
最大读取间隔(words): 32  
最大写入间隔(words): 32

确认 退出

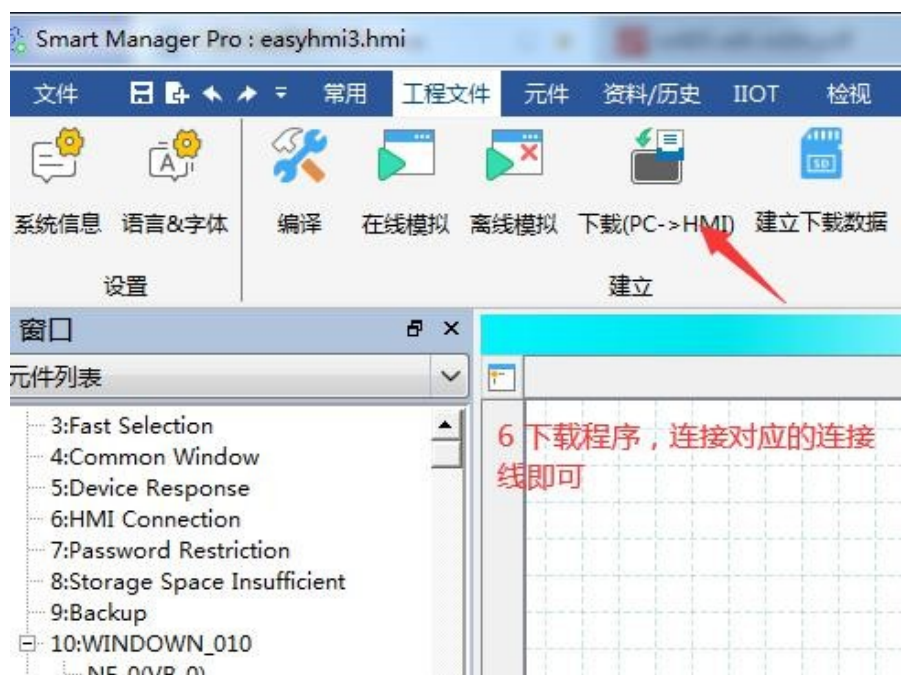
4 选择对应的设备类型、接口类型、通讯参数和通信端口

5.





6.



## Chapter 5 Program Download and Upload and System Update

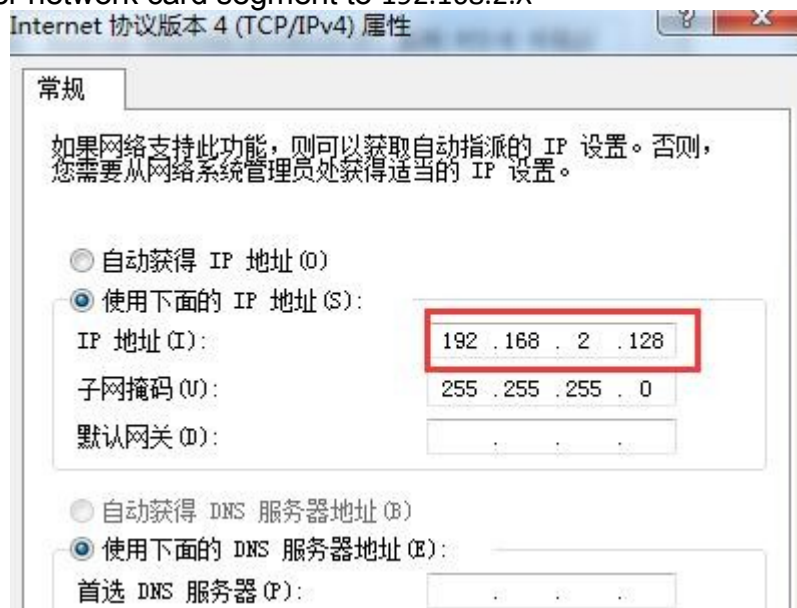
This section describes program downloads and system updates

### 5.1 , Program Download

Touch screen with network port supports Ethernet and U disk download program, touch screen without network port only supports U disk download program

#### 5.1.1 , net port download:

1. Change the computer network card segment to 192.168.2.X



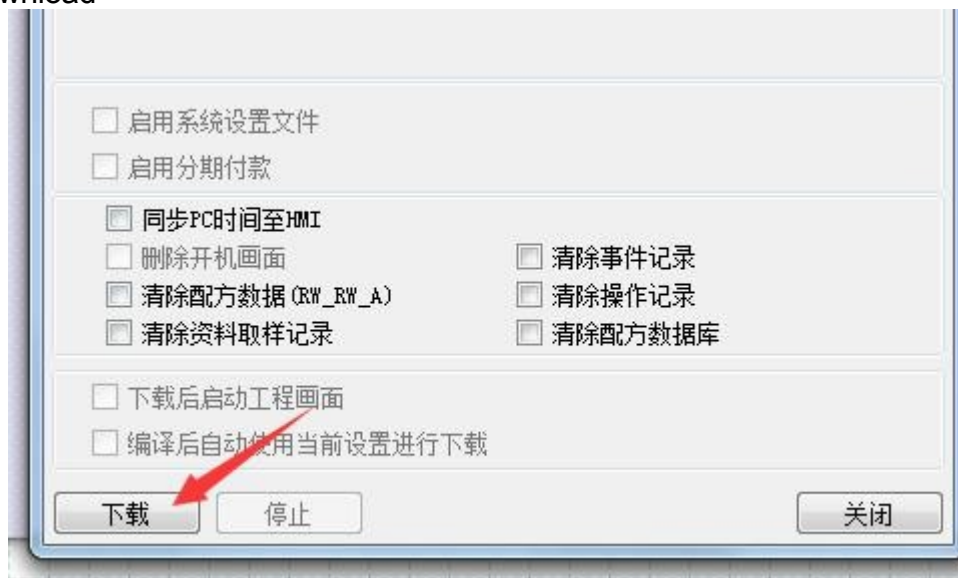
2. Open the project you want to download and click on the software to download it or click on the shortcut F7



3. Enter the touch screen IP (default 192.168.2.121)

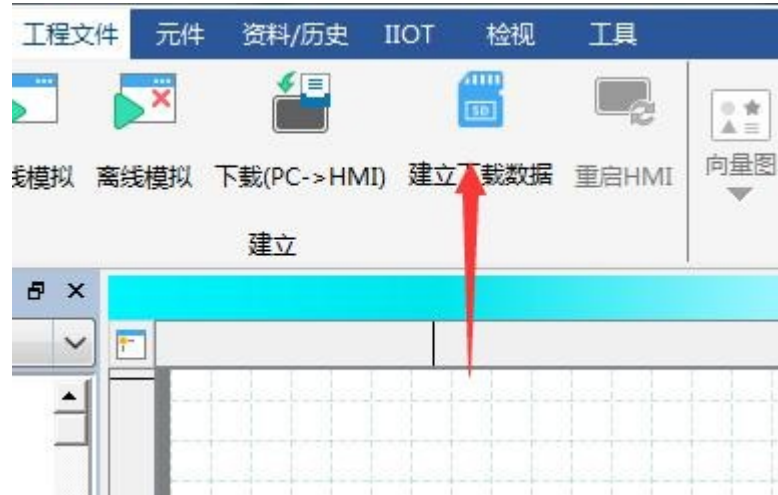


4. Just click to download



### 5.1.2 , U disk download:

1. Open the project to be downloaded and click on the software to create the download data



2. Tap Browse to select the path to save the downloaded file, and then press Create Download File.

At this time, a file named **"project.exhmi"** **will be** generated in the save path, and this file will be stored on a USB drive (USB drive format: FAT32)

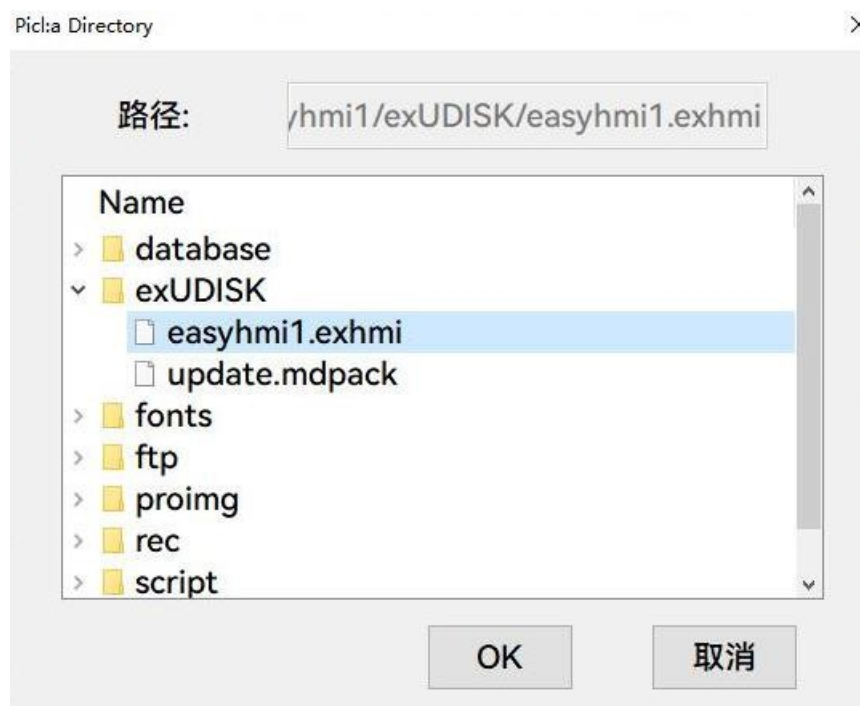


3. When the HMI detects that a device is inserted, the following screen will pop up



Select Download and enter your password.

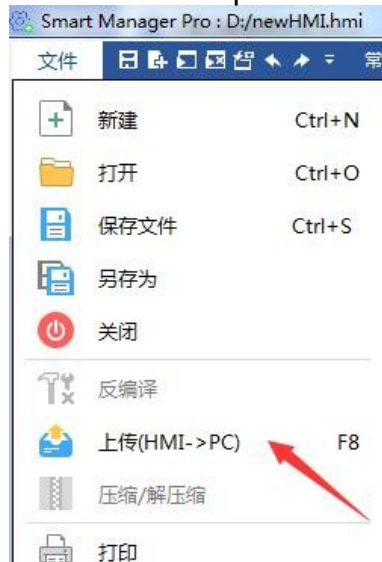
After completing the password confirmation, the directory name under the device will be displayed, and then click OK.



## 5.2 , Program Upload

### 5.2.1 , network port uploads

1. Change the computer network card segment to the network segment of the touch screen
2. Open the touch screen software and click on File - Upload in the upper left corner or click on the shortcut key F8

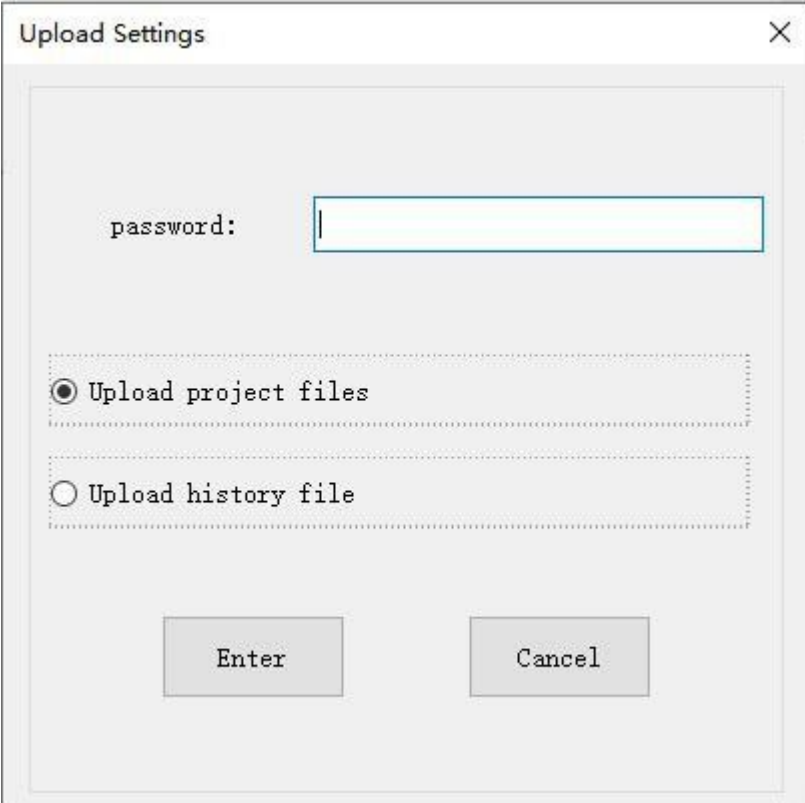


3. Fill in the touch screen IP address, touch screen model, file save location, and click Upload



### 5.2.2 , U disk upload

1. After inserting the device, select Upload and enter the password, then select the upload path and click OK.



Upload Settings

password:

☒ Upload project files

☐ Upload history file

Enter Cancel

Note: The uploader will only upload the project.exhmi file.



### 5.3 , OS system updates

Passive update: When the program downloads the project to the HMI, it detects that the HMI firmware version is low and will prompt for an update.

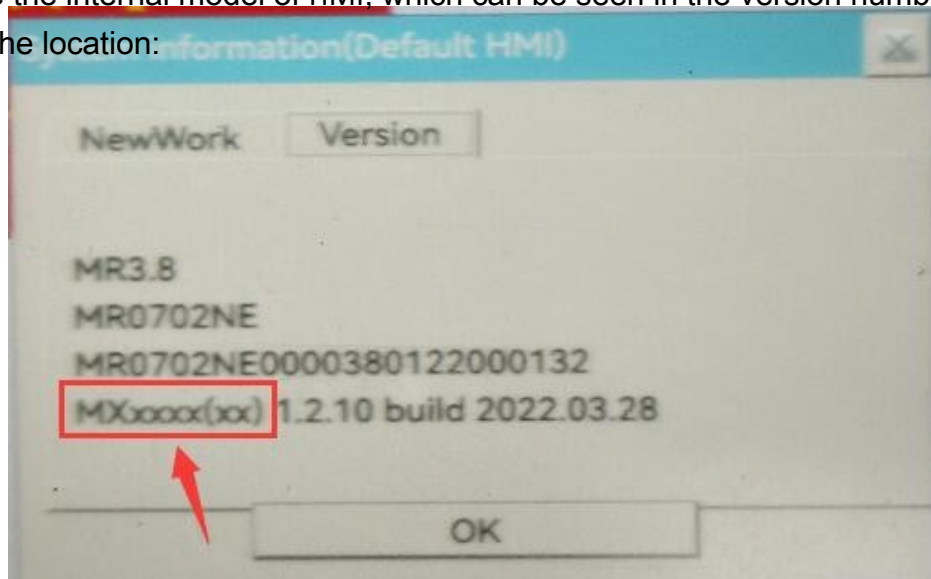


Click Confirm and wait for the update (HMI will reboot to indicate the update is

complete), then proceed to download the project manually. Active update

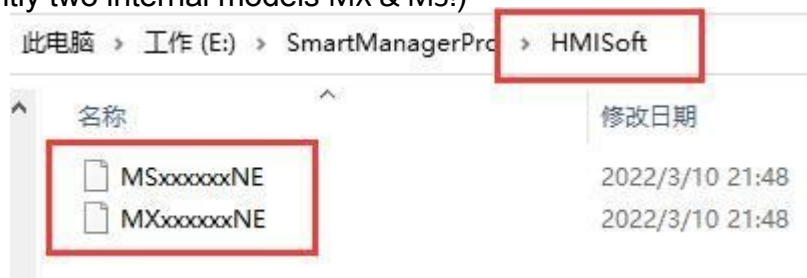
Download the update package to the HMI for system update via USB flash drive

1、 First determine the internal model of HMI, which can be seen in the version number, as the following red box identifies the location:



2. find the required firmware package file for the HMI in the HMISoft folder under the installation directory of the program;

(Note: There are currently two internal models MX & MS!)



3. Copy the corresponding file to the USB drive and rename it update.mdpack;;





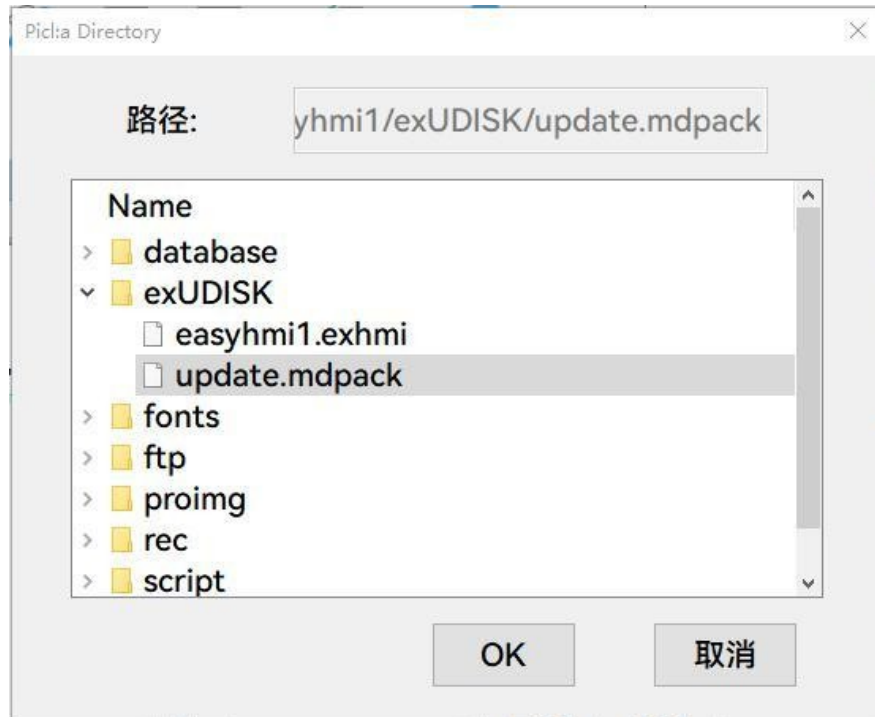
4. inserting the U disk into the HMI;

(Note: At this time the HMI will pop up a setting window when it detects a U disk access, this is not a setting window for updating the system, turn it off first!)

5. Next, open the OS settings of the HMI system settings and click Update System Files (Upgrade OS);



6. select update.mdpack in the pop-up window, click OK and apply;



7. Wait for HMI to reboot, and the update will be completed.  
(Note: Do not unplug the USB drive during this reboot power-up!)

## Chapter 6 Components

This section explains how to design and use various components.

### 6.1 , position status indicator

The [Bit Status Indicator] element is used to display the status of the bit register.

Status 0 means the status of the bit is OFF; status 1 means the status of the bit is ON.

#### Settings

Press the [Component] " [Bit Status Indicator] button on the taskbar to open the [Bit Status Indicator] component property dialog window.

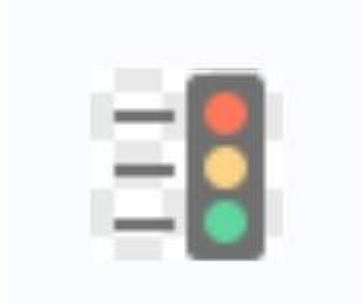


### 6.2 Multi-status indicators

The [Multi-State Indicator] element uses the data in the word register to display relative states and graphics (up to 256 states can be displayed). When the value in the register is 0, [Status 0] is displayed; when the value is 1, [Status 1] is displayed, and so on.

#### Settings

Press the [Component] " [Multi-State Indicator] button on the taskbar to open the [Multi-State Indicator] component properties dialog window, set each property correctly and press the confirmation button to



add a [Multi-State Indicator] component.

### 6.3 , Bit Status Setting

[Bit Status Setting] Used to set the status of the position register. This element provides two modes of operation, manual operation and automatic execution. Using the manual operation mode, pressing this button sets the status of the register to ON or OFF.

If you use the auto-execute mode, the specified action will be executed automatically under some specific conditions. Using this operation mode, even pressing this button will not have any effect.

#### Settings

Press the [Component] " [Bit Status Setting] button on the taskbar to open the [Bit Status Setting] component property dialog window.



### 6.4 , Multi-state settings

[Multi-state setting] Used to set the data of the word register. This element provides two modes of operation, manual operation and automatic execution. Using the manual operation mode, pressing this button sets the data in the register.

If you use the auto-execute mode, the specified action will be executed automatically under some specific conditions. Using this operation mode, even pressing this button will not have any effect.

#### Settings

Press the [Component] " [Multi-state Settings] button on the taskbar to open the [Multi-state Settings] component properties dialog window, set each property correctly and press the confirmation button to add a [Multi-state Settings] component.



## 6.5 , function keys

The [Function Keys] component provides functions such as window switching, keyboard creation, macro execution and screen printing, and can also be used to set USB security keys.

### Settings

Press the [Component] " [Function Key] button on the taskbar to open the [Function Key] component properties dialog window, set the properties correctly and press OK to add a new [Function Key] component.



## 6.6 , position state switching switch

The [Bit Status Toggle Switch] is a combination of the [Bit Status Indicator] element and the [Bit Status Set] element. This element can be used not only to display the status of the register, but also to define a touch area on the window which can be pressed to set the status of the specified register to ON or OFF.

### Settings

Press the [Component] " [Bit State Toggle Switch] button on the taskbar to open the [Bit State Toggle Switch] component property dialog window.



## 6.7 Multi-state switch

The [Multi-State Switch] component is a combination of the [Multi-State Indicator] component and the [Multi-State Set] component. In addition to displaying different states using the data in the registers, this element can also be used to define a touch area on the window that can be pressed to set the data in the specified register.

### Settings

Press the [Component] " [Multi-state Toggle Switch] button on the taskbar to open the [Multi-state Toggle Switch] component properties dialog window.



## 6.8 , slide switch

The [Slide Switch] element is used to create a slider area to display the value or to change the value in the specified register by dragging the slide. [Setting](#)

Press the [Component] " [Slide Switch] button on the taskbar to open the [Slide Switch] component properties dialog, set each property correctly and press the confirmation button to add a new [Slide Switch] component.



## 6.9 , Values

The [Value] element can be used to enter or display the value in the specified word register. [Setting](#)

Press the [Component] " [Value] button on the taskbar to open the [Value] component properties dialog window, set each property correctly and press the confirmation button to add a new [Value] component.



## 6.10 , characters

The [Character] element displays the data in the specified register using ASCII encoding. [Setting](#)

Press the [Component] " [Character] button on the taskbar to open the [Character] component properties dialog, set the properties correctly and press the confirmation button to add a new [Character] component.



## 6.11 , indirect window

The [Indirect Window] component is to control the opening and closing of the specified numbered window using the word register. The first is to define a display area on the window and display the contents of the pop-up window in this display area. The width and height of the displayed pop-up window will not be larger than this display area; the second is to use the [Auto Resize Window] function, which is enabled without defining the area of the pop-up window in advance, and the system will automatically adjust the display area according to the corresponding pop-up window size. To close the pop-up window, simply set the content of the control word register to 0. The difference between [Direct Window] and [Indirect Window] is that the direct window uses the bit state to control the window, while the indirect window uses the word value to control the window.

### Settings

Press the [Component] " [Embedded Window] " [Indirect Window] button on the taskbar to open the [Indirect Window] component properties dialog, set the properties correctly and press the confirmation button to add an [Indirect Window] component.



## 6.12 , Direct Window

The [Direct Window] component uses bit registers to control the opening and closing of pop-up windows. First, a display area is defined on the window, and when the state of the specified bit register changes, the contents of the window are displayed in this display area. The width and height of the displayed window will not be larger than this display area. The pop-up window can be closed by restoring the status of the bit register controlling the pop-up window.

The difference between [Direct Window] and [Indirect Window] is that the direct window uses bit states for window control, while the indirect window uses word values for window control.

### Settings

Press the [Component] " [Embedded Window] " [Direct Window] button on the taskbar to open the [Direct Window] component properties dialog window, set each property correctly



and press the confirmation button to add a [Direct Window] component.

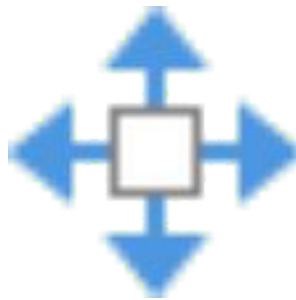


### 6.13 , move/rotate graphics

The [Move/Rotate Graph] component defines the state, move distance and rotation angle of the component. The component will change the state, move distance and rotation angle of the component according to the read address and the data in the consecutive registers.

#### Settings

Press the [Component] " [Animation] " [Move/Rotate Graphics] button on the taskbar to open the [Move/Rotate Graphics] component properties dialog window, set the properties correctly and press the confirmation button to add a [Move/Rotate Graphics] component.



### 6.14 Bar graph

The [Bar Graph] component displays the data in the register using a percentage example with a bar graph. [Setting](#)

Press the [Component] " [Graph] " [Bar Graph] button on the taskbar to open the [Bar Graph] component properties dialog window, set each property correctly and press the confirmation button to add a new [Bar Graph] component.



## 6.15 , Needle

The [Meter Needle] element will indicate the data in the current register using a meter diagram. [Setting](#)

Press the [Component] " [Graph] " [Needle] button on the taskbar to open the [Needle] component properties dialog, set each property correctly and press the confirmation button to add a new [Needle] component.



## 6.16 , Trend Chart

The [Trend Graph] component will graph the data set in [Data Sampling] using continuous line segments for data analysis. [Settings](#)

Press the [Profile/History] " [Trend Graph] button on the toolbar and the [Trend Graph] component properties dialog window will appear.



## 6.17 , historical data shows

The [Historical Data Display] component is used to display the stored data sampling data. Unlike the trend graph, the [Historical Data Display] component uses a table column to directly

编号	时间	日期	ch.1	ch.2	ch.3
34	14:06	01/02/18	0	0	0
33	14:06	01/02/18	0	0	0
32	14:06	01/02/18	0	0	0
31	14:06	01/02/18	0	0	0
30	14:06	01/02/18	0	0	0
29	14:06	01/02/18	0	0	0
28	14:06	01/02/18	0	0	0
27	14:06	01/02/18	0	0	0

display the contents of this data. An example table of historical data is shown in the figure below.

### Settings

Press the [Profile/History] " [History Data Display] button on the taskbar and the [History Data Display] component properties dialog window will appear.



## 6.18 Alarm bar and alarm display

The [Alarm Bar] and [Alarm Display] elements can be used to display events that have been defined in the [Event Log] and the current state of the system meets the trigger conditions, which are also referred to as alarms. [The [Alarm Bar] and [Alarm Display] elements will display these alerts in sequence using the time sequence of the event being triggered. The following figure shows how different components represent the alarms.

For more information on event logging, please refer to Event Logging.

**! (When LW 1 >= 10) 13:21:06 Event 0 (when LW0**

[Alarm Bar] element with multiple events in a single line

13/12/06	13:21:38	Event 2 (when LB10 = ON)
13/12/06	13:21:38	Event 3 (when LB11 = ON)
13/12/06	13:21:38	Event 0 (when LW0 == 100)
13/12/06	13:21:38	Event 1 (When LW 1 >= 10)

[Alarm display] element, multiple lines can be displayed

### Settings

Press the [Profile/History] " [Alarm Bar] button on the toolbar and the component properties dialog window will appear; in the same way, press the [Profile/History] " [Alarm Display] button on the toolbar and the component properties dialog window will appear; set each property and press the OK button to add a new component.



## 6.19 , Event Display

[The Event Display element can be used to display events that have been defined in the Event Log and have met the trigger conditions. The [Event Display] element will display these events in order according to the chronological order in which they were triggered. The [Event Display] component can display the event date, event time, event confirmation time, return to normal time, event information, number of occurrences, and cumulative time content. The information content can be displayed in multiple lines.

8	12/13/06	22:03:15		Event 3 (when LB11 = ON)
7	12/13/06	22:03:14	22:03:17	Event 2 (when LB10 = ON)
6	12/13/06	22:03:13		Event 1 (When LW 1 >= 10)
5	12/13/06	22:03:12		Event 0 (when LW0 == 100)
4	12/13/06	22:02:57		Event 3 (when LB11 = ON)
3	12/13/06	22:02:56	22:03:04	Event 2 (when LB10 = ON)
2	12/13/06	22:02:56	22:02:58	Event 1 (When LW 1 >= 10)

1	07/27/10	14:32:56	14:32:57	14:32:59	Event 0
					LW 0 < 2
					Multi-text

### Settings

When you press the [Profile/History] " [Event Display] button on the toolbar, the [Event Display] component properties dialog window will appear.



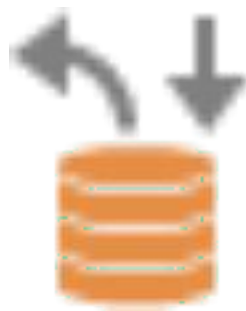
## 6.20 , Data Transfer Data transfer (window)

[Data Transfer (Window)] A component can transfer data from a specified address to other addresses when the window to which the component belongs is opened. [Data transfer (window)] Data transfer can be enabled by using the manual button, or a change in the status of a specific address can be used to trigger the data transfer action.

When using the bit trigger function of the [Data Transfer (Window)] element, if the element is placed in the common window, data transfer is initiated when the trigger conditions are met regardless of the current status of the basic window.

### Settings

After pressing the [Component] " [Data Transfer] " [Data Transfer (Window)] button on the taskbar, the [Data Transfer (Window)] Component Properties dialog window will appear.



## 6.21 , flow blocks

[The Flow Block component represents the movement of a slider or transport line within a duct. Unlike previous flow graphs where you had to measure and verify the alignment between two points when drawing a flow graph using the Move Graph element, each section of the flow block must be a precise horizontal or vertical line segment with a fixed flow interval.

The following are the characteristics of the [flow block] components:

- Each line segment must be a straight line, either vertical or horizontal, with fixed flow intervals.
- Supports dynamic adjustment of flow rate and direction (flow rate and direction can be adjusted with specified registers).
- Security mechanism can be used. The status of the specified bit is used as the basis for displaying or not displaying the flow block. [Setting](#)

Please click the [Flow Block] icon directly to create this component, or click [Component] "[Animation]" [Flow Block] on the toolbar to add this component.





## Chapter 7 Event Login

This section explains how to set up and use event logging.

The basic procedure for using event logging is as follows:




1. Define the event trigger conditions and content.
2. Triggers events conditionally.
3. Event logs can be saved to a specified location.
4. Components can be used to review the complete processing cycle of an event. This section explains how to set up and use event logging.



Please click on this icon to watch the video. Please

make sure you are connected to the network first. Event

### Login Management

The alarm bar  , the alarm display  and the event display  allow you to know the time of the event from occurrence → waiting for processing → alarm release. First, you need to define the content of the event. The maximum number of event entries is 1000.

## Chapter 8 Data Sampling

This section explains how to set up and use data sampling.

After defining the sampling method of "data sampling", such as sampling time, sampling address, and word group length, the acquired sampling data can be saved to a specified location, such as HMI memory or USB flash drive. Data sampling can be used with trend graphs or historical data display components to view the content of data sampling records.

### Data sampling record management

To add a new data sample, follow these steps:

1. Tap [Profile/History] in the menu, and then tap [Profile Sampling].
2. Click [Add] to start the relevant settings, as shown below

资料取样

编号	描述	读取地址	取样方式	触发地址	清除控制地址	暂停控制地址	自动停止	优先执行
1		Local HMI : LW-0	周期方式	停用	停用	停用	停用	停用

\* 使用过多的资料取样可能会消耗更多的保存空间, 并降低画面的更新速度!

新增...
删除
设置...

复制
粘贴
粘贴 (新增模式)

导出...
导入...

关闭

## Revision History

Versions	Revision Date	Revision Notes	Maintaining people
1.0	2022.5.11	Initial Version	Zhang



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