

Haiwell D Series Smart-Link HMI

Haiwell Smart-Link HMI Instructions



Xiamen Haiwell Technology Co.,Ltd en.haiwell.com



User's Manual of Haiwell D Series SmartLink HMI

Edit History

Date	Author	Revised Content
2025/02/20	Overseas Department	V20250220NO.1
2025/05/27	Overseas Department	V20250527NO.2

Catalogue

1. Main Functions 1 2. Core Highlights 1 II Product Specification 2 1. Product Parameters Specification 2 2. Product Model List 4 III Product Description 6 1. Product Front Appearance 6 2. Product Back Side Description 9 3. Product Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 2. Panel installation 16
2. Core Highlights 1 II Product Specification 2 1. Product Parameters Specification 2 2. Product Model List 4 III Product Description 6 1. Product Front Appearance 6 2. Product Back Side Description 9 3. Product Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16
II Product Specification 2 1. Product Parameters Specification 2 2. Product Model List 4 III Product Description 6 1. Product Front Appearance 6 2. Product Back Side Description 9 3. Product Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2. Panel installation 17
1. Product Parameters Specification 2 2. Product Model List 4 III Product Description 6 1. Product Front Appearance 6 2. Product Back Side Description 9 3. Products Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 2. Panel installation 17
2. Product Model List. 4 III Product Description 6 1. Product Front Appearance 6 2. Product Back Side Description 9 3. Product Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16
III Product Description 6 1. Product Front Appearance 6 2. Product Back Side Description 9 3. Products Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
1. Product Post Appearance
2. Product Back Side Description 9 3. Products Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
2. Product Back Side Description .9 3. Products Size .10 4. Product Interface .14 4.1 Interface Diagram .14 4.2 Definition of Communication Interface .15 5. HMI Electrical Connection .15 5.1 Power Supply Connections .15 5.2 Ethernet Connection .16 IV HMI Installation and Use .16 1. Bracket arm installation .16 2. Panel installation .17
3. Products Size 10 4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
4. Product Interface 14 4.1 Interface Diagram 14 4.2 Definition of Communication Interface 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
4.1 Interface Diagram. 14 4.2 Definition of Communication Interface. 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
4.2 Definition of Communication Interface. 15 5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
5. HMI Electrical Connection 15 5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
5.1 Power Supply Connections 15 5.2 Ethernet Connection 16 IV HMI Installation and Use 16 1. Bracket arm installation 16 2 Panel installation 17
5.2 Ethernet Connection
IV HMI Installation and Use 16 1. Bracket arm installation 16 2. Panel installation 17
1. Bracket arm installation 16 2. Panel installation 17
2 Panel installation 17
2 Settlement installation (Only D4 is supported)
5. Settlement instanation (Only D4 is supported)
4. External 4G card installation
5. Antenna installation
V HMI Settings
1. HMI software
2 HMI Background setting 21
2.1 Background set the access mode 21
2.2 Engineering setup
2.3 The local Settings mainly set the basic functions and parameters of the HMI
2.4 System information
2.5 Cloud Settings
2.6 Network Settings
VI Scada project connection

1. Project establishment	61
1.1 New project	61
1.2 Newly constructed equipment	62
1.3 Create new variable	63
1.4 Editing screen	63
1.5 Debug and run	64
2. Equipment management tool	65
2.1 Local management	65
2.2 Cloud management	66
3. Project download	66
3.1 Local download	66
3.2 Remote download	68
4. Project program operation	68
5. Local/Remote Access HMI Screen	69
5.1 PC local/remote access	69
5.2 Remote access on mobile devices	72
VII Remote transparent transmission PLC	73
1. Modify the network segment of the computer supply network	73
2. Open the device management tool	74
3. Connect transparent transmission devices	75
4. VPN status check	76
5. Transparent transmission PLC	78
VIII HMI calibration	80
1. Enter calibration mode	80
2. Operation calibration mode interface	84
IX Common Problems	85
1. What is the factory IP address for HMI?	85
2. How to download projects locally from HMI?	85
3. What is the password for uploading HMI factory demonstration project?	85
4. Is there any other way to enter HMI background settings besides on the screen?	85
5. Can I download programs from HMI's USB and how can I download them?	87
6. How to deal with unstable serial communication or offline communication reports between HMI and 485 devices?	87
7. HMI can communicate with other instrument devices such as flow meters and electric meters normally, but the v	alues
read are different. How to handle this?	88

1. Self-shopping IoT network card binding domain name collection9	1
Appendix9	1
14. RTSP access to Hikvision camera using configuration camera example path cannot be displayed, how to handle it? 9	0
13. How to handle RTSP cameras that can display images but cannot be controlled?	0
12. How to deal with VPN transmission failure to connect to PLC?	0
11. How to handle HMI WiFi connection failure?9	0
10. How to deal with HMI displaying no service in the background when placing 4G card?	9
9. How to troubleshoot if HMI cloud settings are not online?	9
8. How to unbind the machine owner Akey in HMI cloud settings?	8

I. Product Instruction

1. Main Functions

Haiwell HMI embedded system is developed based on embedded Linux system and is an embedded system software that runs on industrial automation monitoring and management equipment. By running Haiwell configuration project, it can intuitively observe the on-site situation of the industry, communicate with various industrial control devices, and monitor the production signals collected from the industrial site. Timely notify relevant personnel of alarm information on industrial sites through screens, computer language, WeChat, SMS, email, and other forms. Support the use of network engineering to enable multiple devices to act as clients and servers for each other, share data through the network, and achieve distributed control. Support recording and storing data. Analyze and analyze real-time and historical operating data to solve production failures, improve production efficiency, and enhance product quality.

2. Core Highlights

• LAN interconnection: instant connection with mobile phones, tablets, computers, televisions, cameras, and other HMIs

• Internet of Things function: instant connection with computers, tablets, computers, televisions, cameras and other HMI through the Internet

• Remote access: Breaking the traditional VNC protocol, no need for secondary configuration, what you get is what you get; Holding asynchronous synchronous monitoring for multiple people simultaneously

• Data Security: All data can be transmitted and stored on designated servers, deployed locally or on the public network, and is secure and controllable

• Open interface: Supports MQTT, OPCUA, HTTP, TCP and other interfaces to easily integrate with ERP, MES and other third-party applications

• Screen integration: third-party software APP、 Mini programs and other applications can directly embed HMI screens, instantly possessing remote control capabilities for devices

• Device intelligence: supports applications such as text to speech broadcasting, full scene voice intercom, audio file playback, camera monitoring, RFID/NFC recognition, etc

• Electronic Dashboard: By networking with Haiwell TVBOX, it can easily meet large screen application scenarios such as data visualization and centralized device monitoring, achieving intelligent work

• Satellite positioning: supports Beidou positioning and trajectory tracking, making device positioning more accurate and achieving functions such as dynamic trajectory tracking and electronic fencing

• New definition of HMI: The entire series adopts high-definition screen, narrow border design, builtin eSIM, microphone, speaker, RFID components

II Product Specification

1. Product Parameters Specification

Specificatio	ons Parameter	D4	D7	D7 pro	D10	D10 pro	D15	D15 Pro				
Software	Programming Management Software			Haiwell c	oud configuration St	CADA						
	Monitor	4.3 // TFT	7 /	, TET	10.1 ″	TFT	15.6 //	TFT				
	Resolution Ratio	800x480 pixels	1024x	600 pixels	1280x80	10 pixels	1920x10	80 pixels				
Display	Colour			16.7M			26	2K				
	Lightness	280 cd/m ²		45	0 cd/m ²		350 c	cd/m²				
	View Angle	80'/80'/80'/80'	80'/80'/80' 85'/85'/85'									
	Touch Type	resistance-type			capacitive	screen	5					
	Backlight Type				LED							
Backlight	Backlight Life Span			50,000 hours								
	Automatic Sleep Function	support, configurable										
	Flash	4GB	4GB 8GB									
	RAM	512M	512M	1G	1G	1G	1G	1G				
	Ethernet Port	10/100 Base-T*1	10/100 Base-T*1	10/100 Base-T*2	10/100 Base-T*1	10/100 Base-T*2	10/100 E	3ase-T*2				
Hardware	Serial Port	COM1:RS232*1 COM2:RS485*1	S		COM1:RS COM2:RS COM3:RS	232*1 485*1 485*1						
	USB Host	USB2.0 *1	USB2.0 * 1	USB2.0 * 2	USB2.0 * 1	USB2.0 * 2	USB2	2.0 * 2				
	RTC			Bu	ilt in real-time clock							
	Input Power Supply	0			24V DC±20%							
	Function waste	6W@24V DC	12W@24V D0	15W@24V DC	13W@24V DC	17W@24V DC	23W@2	24V DC				
Power Supply	Power protection		Equippo	ed with surge protec	ction and anti revers	e connection protec	tion					
	withstanding voltage				500VAC							
	Isolation resistance			ove	er 50MΩ @500VDC							

	Vibration resistance	10∼25 Hz (X、Y、Z axis 2G/30 minutes)										
	cooling method			N	atural wind cooling							
	protection grade	The panel meets IP65 standards, and the body meets IP20 standards										
	Storage environment temperature	-20~70°C										
Environment	operating ambient temperature		-10°C ~ 60°C									
	relative humidity	10 ~ 90% RH (no condensing)										
	application environment	Dustproof, mo	Dustproof, moisture-proof, corrosion-resistant, and protected from electric shock and external impact environments									
Appearance	Shell Material	Engineering plastic ABS (flame retardant grade)		All aluminum alloy shell+glass panel								
	Overall Dimension (WxHxD)	137x85x30mm	193>	<120x33mm	260x167	x32mm	394x256x45mm					
	opening size (WxH)	132x80mm (R7mm)	187x114mm(R7mm)		254x161mm(R7mm)		383x245mm(R7mm)					
	Weight	0.3kg		1.0kg	1.5	kg	3.2kg					
	Installation Method		panel installati	ion	panel installation、VESA(75*75) VESA(100*100)							
	WiFi (optional)			Suppo	ort 802.11b/g/n,optior	nal						
	Wireless Network (optional)	4G(China) optional		CI		ptional						
Function	RFID	Not support	Not support	standard configuration	Not support	standard	Not support	standard configuration				
	satellite positioning	Not support			optiona	al						
	Speaker	external connection		2	built-in							
	Microphone	external connection	external connection	built-in	external connection	built-in	external connection	built-in				

User's Manual of Haiwell D Series SmartLink HMI

Certification type

CE

2. Product Model List

Model	TFT screen	Storage	LAN+COM	USB	Intelligent configuration	Voice	Local video	RFID	GPS	WIFI	Wireless network	Hole size W*H (mm)	Product size W*H*D (mm)
D4	4.3"	4G+512M	1+2	1		Yes						132x80	
D4-G	800*480	4G+512M	1+2	1		Yes					4G (China)	Rounding	137x85x30
D4-W	HD	4G+512M	1+2	1		Yes				Yes		chamfer:R7 mm	
D7		8G+512M	1+3	1	speaker	Yes							
D7-G		8G+512M	1+3	1	speaker	Yes					*Build-in eSIM		
D7-W		8G+512M	1+3	1	speaker	Yes				Yes			
D7-GP		8G+512M	1+3	1	speaker	Yes			Yes		*Build-in eSIM		
D7-GW		8G+512M	1+3	1	speaker	Yes				Yes	*Build-in eSIM		
D7-E		8G+512M	1+3	1	speaker	Yes					Global 4G		
D7-EW		8G+512M	1+3	1	speaker	Yes				Yes	Global 4G		
D7 Pro	7" 1024*600	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes				187~11/	
D7 Pro-G	HD Capacitive	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes	5		*Build-in eSIM	Rounding	193x120x33
D7 Pro-W	Screen Aluminum Alloy	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes		R7mm	
D7 Pro-GP	Shell	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes	Yes		*Build-in eSIM		
D7 Pro-GW		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes	*Build-in eSIM		
D7 Pro-E		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes			Global 4G		
D7 Pro-EW		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes	Global 4G		
D10		8G +1G	1+3	1	speaker	Yes							
D10-G		8G +1G	1+3	1	speaker	Yes					*Build-in eSIM		
D10-W	10.1"	8G +1G	1+3	1	speaker	Yes				Yes			
D10-GP	1280*800	8G +1G	1+3	1	speaker	Yes			Yes		*Build-in eSIM	054 404	
D10-GW	HD	8G +1G	1+3	1	speaker	Yes				Yes	*Build-in eSIM	254x161	
D10-Е	Capacitive	8G +1G	1+3	1	speaker	Yes					Global 4G	chamfor	260x167x32
D10-EW	Screen	8G +1G	1+3	1	speaker	Yes				Yes	Global 4G	R7mm	
D10 Pro	Aluminum Alloy Shell	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes					
D10 Pro-G		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes			*Build-in eSIM		

D10 Pro-W		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes			
D10 Pro-GP		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes	Yes		*Build-in eSIM		
D10 Pro-GW		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes	*Build-in eSIM		
D10 Pro-E		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes	Global 4G		
D10 Pro-EW		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes	Global 4G		
D15		8G +1G	2+3	2	speaker	Yes							
D15-G		8G +1G	2+3	2	speaker	Yes					*Build-in eSIM		
D15-W		8G +1G	2+3	2	speaker	Yes				Yes			
D15-GP		8G +1G	2+3	2	speaker	Yes			Yes		*Build-in eSIM		
D15-GW		8G +1G	2+3	2	speaker	Yes				Yes	*Build-in eSIM	1	
D15-E		8G +1G	2+3	2	speaker	Yes					Global 4G	1	
D15-EW		8G +1G	2+3	2	speaker	Yes				Yes	Global 4G		
D15 Pro	15.6" 1920*1080	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes				2022/245	
D15 Pro-G	HD Capacitive	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes	0		*Build-in eSIM	Rounding	394x256x45
D15 Pro-W	Screen Aluminum Alloy	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes		R7mm	
D15 Pro-GP	Shell	8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes	Yes		*Build-in eSIM		
D15 Pro-GW		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes	*Build-in eSIM		
D15 Pro-E		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes			Global 4G		
D15 Pro-EW		8G +1G	2+3	2	microphone, speaker	Yes	Yes	Yes		Yes	Global 4G		

III Product Description 1. Product Front Appearance



Figure 1 HMI D4



Figure 2 HMI D7



Figure 3 HMI D7 Pro



Figure 4 HMI D10



Figure 6 HMI D15

Speaker	Microphone			
]	
2024/12/25 16:28:32 Wednesday Smart Production M	lanagement Visualization Scr	een Production Sta	🔁 English 👻	
(Horn (Horn) (Ho	e Online Offline	/Units	8725 Monthly Production	
Device Utilization Trend	Operation Management	2024 Weekly Production	313 Daily Production	
	CF Puss Rate OC Fuss Rate	ge Proportion	12	
	100 x Core Requirements Compliance Refer		2023	Touch display area
	Ene	rgy Consumption Statistics	for the Week	
Energy Consumption This Month (kW-h)	Consumption	k Device one Device two	Device Device three four	
	e e talle i			
1 2 3 4 5 6 7 8 9 10 ⁻¹¹ 12 ⁻¹³ 16 ⁻¹³ 16				
	A Haiwell		RFID	RFID sensing area

Figure 7 HMI D15 Pro

2. Product Back Side Description



Figure 8 Instructions on the Back of HMI



Figure 9 HMI Side Description

3. Products Size



Figure 10 HMI D4



Figure 12 HMI D7 Pro



Figure 14 HMI D10 Pro



Figure 16 HMI D15 Pro

4. Product Interface4.1 Interface Diagram①HMI D4/D4-G/D4-E/D4-W



Figure 17 HMI D4 common interface

②HMI D7/D7-G/D7-W/D7-GP/D7-GW/D7-E/D7-EW



Figure 18 HMI D7 common interface

③HMI D7 Pro/D7 Pro-G/D7 Pro-W/D7 Pro-GP/D7 Pro-GW/D7 Pro-E/D7 Pro-EW



Figure 19 HMI D7 Pro common interface

④HMI D10/D10-G/D10-W/D10-GP/D10-GW/D10-E/D10-EW



Figure 20 HMI D10 common interface

(5)HMI D10 Pro/D10 Pro-G/D10 Pro-W/D10 Pro-GP/D10 Pro-GW/D10 Pro-E/D10 Pro-EW



Figure 21 HMI D10 Pro common interface

⑥HMI D15/D15-G/D15-W/D15-GP/D15-GW/D15-E/D15-EW/D15 Pro/D15 Pro-G/D15 Pro-W/D15 Pro-GP/D15 Pro-GW/D15 Pro-E/D15 Pro-EW



Figure 22 HMI D15/D15 Pro common interface

4.2 Definition of Communication Interface

Table 1 Definition of Nine Pin Serial Port Pins (D7/D10/D15 Series)

COM1/COM2Definition of nine pin serial port pins								
	Pin No	definition	pin instructions					
	1	COM2:A+	RS485communication "A+"					
	2	COM1:RXD	RS232 communication receiving data					
	3	COM1:TXD	RS232 communication sending data					
	4	NC	None Signal					
	5	COM1:GND	Signal ground wire					
	6	COM2:B-	RS485 communication "B+"					
6789	7	NC	None signal					
	8	NC	None signal					
RS232:COM1 RS485:COM2	9	NC	None signal					

Table 2 Definition of COM3 serial port pins (D7/D10/D15 Series)

	COM3 RS485 pin definition							
1 2 3	Pin No	definition	pin instruction					
	1	COM3:A+	RS485 communication					
	2	COM3:B-	RS485communication					
	3	COM3:GND	Signal ground wire					

5. HMI Electrical Connection

5.1 Power Supply Connections

The HMI power interface is located on the leftmost side of the bottom of the device. The "24V+" of

the switch power supply is connected to the "24V+" port of the device, and the "24V -" (0V) of the switch power supply is connected to the "24V -" port of the device. In order to better protect the equipment and reduce electromagnetic interference, the HMI can be grounded and connected to the "GND" port of the device.

In addition, the D series 15 inch HMI has a 12V power supply port, and it is recommended to use 24V voltage. Please refer to 4. Product Interface -4.1 Interface Diagram ⁽⁶⁾ for specific interface definitions.





5.2 Ethernet Connection

The Ethernet LAN port of HMI is located on the far right side of the bottom of the device and is mainly used to connect the PC through the HMI network cable, achieve communication between the HMI and PC, and complete operations such as uploading and downloading projects. The LAN port can also be connected to the PLC for communication.

IV HMI Installation and Use

1. Bracket arm installation

Step 1: Prepare and position the support arm

1. Check if the bracket arm includes all necessary accessories, such as M4 screws, nuts, and installation instructions.

2. According to the instructions of the bracket arm, determine the installation position of the HMI and mark the fixing points of the bracket arm.

3. Place the bracket arm in the designated position, ensuring that the fixing hole of the bracket arm aligns with the M4 hole on the back of the touch screen.

Step 2: Assemble the bracket arm

1. Connect the various components according to the assembly instructions of the bracket arm to form a complete bracket structure.

If the bracket arm needs to be fixed to a wall or other surface, use an electric drill to drill holes at the marked fixing points and install the corresponding wall mounted accessories.

3. Secure the bracket arm to the wall or other surface, using screws and nuts to ensure its firmness.

Step 3: Install the touch screen

1. Align the four M4 holes on the back of the touch screen with the fixed holes on the bracket arm.

2. Thread the M4 screw through the fixed hole of the bracket arm and place the nut on the bracket arm.

3. Use a screwdriver to tighten the screws until the touch screen is securely fixed to the bracket arm, and check if the touch screen is installed flat and stable.



Figure 26 Bracket arm installation

Matters needing attention:

① Before installing the bracket arm, ensure that the selected installation surface can withstand the total weight of the touch screen and bracket arm, avoiding installation in unstable or insufficiently load-bearing areas.

2 During installation, ensure that all screws and nuts are securely fastened in place to prevent the touch screen from coming loose during use.

③ This method is currently only supported on HMI D10 and HMI D15 series.

2. Panel installation

Step 1: Prepare to install the panel

1. Determine the opening size: Determine the opening size on the panel based on the HMI size and installation instructions.

2. Drilling: Use appropriate tools to drill holes on the installation panel. Ensure that the size and shape of the openings match the installation holes of the HMI.

Step 2: Install HMI

1. Align the HMI with the opening: Align the HMI with the opening on the panel, ensuring that the front of the HMI faces outward and the back faces inward.

2. Gently push in: Slowly and evenly push the HMI into the opening until the edge of the HMI is flush with the panel.

Step 3: Fix HMI

1. Find the buckle: There are 4 buckles on the side of the HMI.

2. Locking buckles: Gently press each buckle with your hand to secure it to the edge of the installation panel. Ensure that each buckle is securely fixed to the panel to prevent the HMI from loosening or falling off.

Matters needing attention:

① The installation direction must be in accordance with the instructions in this manual, and the wiring must strictly follow the direction marked on the terminal, otherwise it may cause product failure or burning.

② The product and other bottom components must maintain sufficient space to avoid equipment damage caused by poor heat dissipation.

3. Settlement installation (Only D4 is supported)

Step 1: Assemble the Double-Layer Frame

1. Align the through-holes of the mounting iron parts with the stude on the panel. Use a screwdriver to tighten the screws in a diagonal sequence (top-left \rightarrow bottom-right \rightarrow top-right \rightarrow bottom-left).

2. Ensure the frame is stable without shaking and the surface is flat without protrusions.

Step 2: Embed the HMI Device

1. Place the HMI face up and horizontally insert it into the panel opening. Gently push until it is fully embedded.

2. Check that the device surface is flush with the panel and there are no gaps around the edges.

Step 3: Secure the Device Clips

1. Insert the 4 fixing clips into the left and right hanging holes on the machine body. Use a screwdriver to tighten them evenly.

2. Ensure the screws press against the mounting iron parts with moderate tightness, and the device does not shift.

Step 4: Apply the Custom Face Sticker

1. Clean the panel surface, peel off the back adhesive of the face sticker, and align it with the opening position. Apply it smoothly.

2. Press to remove air bubbles, adjust until the display area is fully exposed, and ensure no edges are curled up.

Matters needing attention:

Design the opening panel and mounting iron parts according to the dimensional drawings provided in the product manual, with a material thickness between 1mm and 2mm.



Figure 27 HMI D4 Series Settlement Installation

4. External 4G card installation

Step 1: The HMI external 4G card is installed inside the rear of the HMI. Remove the aluminum alloy backplane shell. The backplane has screws that can be unscrewed.



Figure 28 HMI 4G card

Step 2: After disconnecting the aluminum backplane shell, press the card slot downward to open it, insert the 4G card after opening it, and press the card slot to lock it.



Figure 29 HMI 4G card installation

Note: After inserting the 4G card, you need to restart the HMI to correctly identify the SIM card. **5. Antenna installation**

The HMI can be equipped with 4G/WiFi/GPS functions, for the best signal strength, please draw the antenna out of the control cabinet. After the antenna is extracted from the HMI, route the cable on the cabinet door, and pay attention to the antenna to avoid the power cord. The antenna goes straight through the opening and closing side of the cabinet door to the opening hole on the top of the cabinet to draw out the antenna, as shown in Figure 30 below:



Figure 30 Schematic diagram of HMI antenna installation

V HMI Settings

1. HMI software

HMI needs to be used with Haiwell SCADA editing software. Please download it from the download center of domestic PLC|HMI|SCADA on the official website of Haiwell - Industrial Internet of Things | (https://haiwell.com/download/download.php?class2=34).

2. HMI Background setting

2.1 Background set the access mode

Press and hold the upper right corner of the HMI screen (about 5s) and release it when you hear the "drip" sound from the device. At this time, the HMI enters the background setting screen.



Figure 31 Entering background Settings

2.2 Engineering setup

The Engineering Settings mainly support the download of the engineering operation file generated by the U disk, and the access to the engineering screen of other intelligent connected devices in the LAN through the device IP.

Connection network Engineering:

Enter the HMI background Settings screen, click [Engineering Settings], click [Connect to Network Engineering], and enter the IP address that needs to be connected to the HMI in the same LAN. Remote access between the HMI and HMI can be realized.

	Project	Back
1	Project Nematlement environt Please enter the IP address to connect: Pro 192 168 1 112 Pro Pro Close Connect	•
	Connect Remote Download Project	RFID

Figure 32 Connecting the network project

Connect to local projects:

After the HMI connects to the network project, other HMI projects are accessed and run. To return to the original HMI project, click 【Run Local Project】.

Download project:

①Generate a USB flash drive run file

Step 1: Create a project, click [Project] in the Scada menu bar, expand the TAB, click [Generate USB drive run file...];

Step 2: Enter the compilation interface, after compiling, set the appropriate output path, click [Save];

Step 3: After the file is saved successfully, the system displays a dialog box indicating that the file is saved successfully. Click **[**OK**]** .

Proj	aiwell Cloud Scada[3.40.0.11] - C:\ ject(P) Edit(E) View(V) De	Users\ChenBingMei\Desktop\123.hwdev bug(D) Tool(T) Help(H)	
÷	New content(N)	▶ 5) ▶ Offline simulation(F6)	2400
	New project(W) Open project(O)	Generate U disk run file	×
	Recent project(R)	2. Project name:	
	Close project(C) Save project(S) Ctrl+S	_i* 123	
- 19	Save project as(V)	D. Initial config	
	Generate U disk run file	Reserve Formula Reserve history and alarm ro	ecords
	Save the current window(T) Save current window as(U)	DE Reserve the unerate records Reserve the power-off protection of equipment end	ent end
	Project properties(P)	Di Reserve attachment	
	Quit(Q)	OK	Cancel
	Font manager	Mai	
	Project language center	Ta: Prompt	×
	Y Peripheral Data reporting server Cloud platform data monite Audio OPC UA	(Db. Successfully generating the U disk run file, save path: C:\Users\ChenBingMei\Desktop\123.pix	
		Ev	

Figure 33 Generate the USB flash drive run file

2USB Flash Drive download project

Step 1: Enter the HMI background setting interface, click [Engineering setting], enter the engineering setting interface;

Step 2: Click [Download Project] to enter the project download interface;

Step 3: Insert U disk, select **[**USB**]** ; Select the project according to the requirements, click **[**OK**]** and the HMI device will automatically restart after the download is successful.

	Dura inst	ack
	Select the project file:/渐的 Project ! 为 Back	
	Project / magn.jk milit ist	
	Project (
	Project :	
	Selected file:TEST.pjx Close OK Downloa	
16		
	A Haiwell	RFID

Figure 34 USB flash drive download project

2.3 The local Settings mainly set the basic functions and parameters of the HMI.

【Local Settings】 :

(1)Set the terminal name

Enter the HMI background setting interface, click [Local Settings], in the [Local Settings] interface, you can see [Terminal Name], click [Settings], enter a new terminal name, click Enter on the keyboard,

terminal name: device name.

	Settings	Back
1	Settings Security Others Sounds Terminal Name: Set Terminal code: Set Screen Saver: 10 min Screen light: - 60 Reduce the brightness: Auto Time:	•
	Time: 2024-12-16 14:44:18 Auto Time Set	

Figure 35 Setting the terminal name

Note: The terminal name contains 1 to 10 characters. **2**Set the terminal number

Enter the HMI background setting interface, click [Local Settings], in the [Local Settings] interface, you can see [Terminal Number], click [Settings], enter the new terminal number, click Enter on the keyboard, terminal number: device number.

	Settings	Back
1	Settings Security Others Sounds Terminal Name: HMI Terminal code: Set Screen Saver: 10 min Screen light: - 60 Reduce the brightness: Auto Time: Time: 2024-12-16 14:44:54 Auto Time Set	
	A Haiwell	RFID

Figure 36 Setting the terminal number

Note: The terminal number contains 0 to 10 characters.

③Set network timing

Enter the HMI background setting interface, click 【Local Settings】, when the network pair is opened in the 【Local Settings】 interface, and then click the automatic time setting, the current time will automatically correspond to the network time.

Settings Ba	ck
Settings Security Others Sounds	
Terminal Name: HMI Set	
Terminal code: 5 Set	
Screen Saver: 10 min Save	
Screen light: - 60 +	
Reduce the brightness: 5 min(The brightness does not decrease at 0)	
Auto Time	
Time: 2024-12-16 14:45:32 Auto Time Set	
A Haiwell	RFID

Figure37 Set network timing1

Enter the HMI background setting interface, click 【Local Settings】, when the network pair is closed in the 【Local Settings】 interface, click Change time, you can manually enter the setting time, click OK after the input is completed, click Cancel will not save the input.

Settings	Back
Settings Secret Automation Constructions	
Terminal Name 2024 - 12 - 16 Terminal Name 14 : 46 : 21	
Screen Saver: Set up success Cancel OK	
Screen light: - 60 + Reduce the brightness: 5 m/n(The brightness does not decrease at 0)	
Auto Time: 2024-12-16 14:46:22 Modify	

Figure38 Set network timing2

[Security Settings] :

(1)Download Project Password

Enter the HMI background setting interface, click [Local Settings], open the [Download Project Password] function in the [Security Settings] interface, and set the HMI download project password. After the successful setting, users need to verify the password to download the project and update the firmware; otherwise, relevant operations cannot be performed.



Figure39 Download Project Password

Note: The project password must be set carefully when you download it. If you forget the password, you need to restore the factory Settings to reset it.

②Access background password

Adding password verification to enter the background can avoid security risks and economic losses caused by irrelevant personnel's mis operation, the specific operations are as follows:

Step 1: Enter the HMI background setting interface, click [Local Settings];

Step 2: Open the [Enter Background Password] function on the [Security Settings] interface;

Step 3: Set the password for logging in to the background. After the password is set, the user needs to verify the password for logging in to the background Settings.

	Settings	Back	
	Settings Security Others Sounds		
	Download Project Password:		
Î	Enter the set interface password:		
	LAN Access: Set Password Empty password		6
	Cloud management update firware and project need local confirmation		
	Remote write requires local confirmation 🕥		
	A Haiwell	RFI	19

Figure40 Set the background password

Note: Set the password to enter the background carefully. If you forget the password, contact Haiwell Technology to clear it.

3LAN access

Enter the HMI background Settings screen, click [Local Settings], switch to the [Security Settings] screen, and enable LAN access by default. The user can click [Set password], enter the password to be set, press Enter, enter the password just entered again, and press Enter, that is, save the LAN access password just set. If the user wants to access the device through the LAN, mobile APP, cloud website, TVBOX, etc., the user must enter the correct LAN access password.

Settings	Back	
Settings Security Others Sounds		
Download Project Password: 🔿		
Enter the set interface password:		
LAN Access: Set Password Empty password		
Cloud management update firware and project ne confirmation	ed local	
Remote write requires local confirmation O		

Figure41 Set the LAN access password

Click to clear the password, the pop-up "Setting successful, it is recommended to set the password to improve security", that is, clear the previously set LAN password, the user can access the HMI through the LAN (without entering the password).

	Settings	Back	
	Settings Security Others Sounds		
	Download Project Password:		
1	Enter the set interface password:		
	LAN Access: Set Password Empty password Cloud management update firware and project need local		6
	confirmation		
	Remote write requires local confirmation 🔿		
		RFID	20

Figure42 Clear the LAN access password

(4)Cloud Management Firmware and engineering updates require local confirmation (off by default)

After this function is enabled, you need to apply for local confirmation when performing remote firmware update or engineering.

ce Operateion		Device Operateion	
Download Project	Upload Project	Download Project	Upload Project
Update the firmware	Update Time	Update the firmware	Update Time
Prompt	×	Prompt	×
Penetr Apply	Cancel		Cancel
Penetr	cancel		Cancel

Figure43 Cloud Management Update firmware request

After the application is successful, the local device will receive the corresponding message, and the following screen will be displayed. After the update is approved, the device will automatically restart (rejected after 120S by default).

	Settings	Back
	Settings Security Others Sounds Download project Download Project Identity: Akey	
1	Enter the s LAN Access: Cloud man confirmation	
	Remote write requires local confirmation	

Figure44 HMI Remote download project prompt box

	Settings	Back
Settings Secur	rity Others Sounds	
	pdate firmware	
Download Pro	nickname: hai	
	Identity: Akey	
Enter the se	Account: 1735123456	
LAN Access:	apply the update firmware the device will restart after update!	
Cloud man	Reject(112) Agree	
confirmation		
Remote write	requires local confirmation 🔵	

Figure45 HMI Remote firmware update prompt box

⑤Remote writes require local confirmation (off by default)

After this function is enabled, you need to apply for local confirmation when using the cloud APP or cloud website for remote operation.

A Haiwell 海为[®] en.haiwell.com



Figure46 HMI Remote firmware update prompt box

After receiving the request, the following screen will be displayed on the local device. If the request is approved, the device has the remote write permission (rejected after 120S by default).

1	User logout User managemen	Remote operation application Akey1 user1 136123456 Apply for operational permissions! Reject(112) Agree	pe Page Trend Chart Page Camera	
		A Haiwell		RFID

Figure47 HMI Remote operation request prompt box

	Remote operation application	
	Akey1 user1 136123456 Remote operation in progress	
User lo	Close Cancel authorization pe Page	
User manage	ement Camera	RFI®

Figure 48 HMI Remote operation request authorization

The following page is displayed when another device applies for the application again.

Other users are currently operating, please try again later

Figure49 HMI Prompt box

An interactive identifier appears in the lower left corner of the local device. You can use this identifier to modify permissions on the device.



Figure 50 HMI Interactive identification

After the authorization is cancelled, the following screen is displayed on the remote device. In this case, other remote devices can apply for the operation.
	Operation permission has been lost	
	192.168.130.30 Operation permission has been lost	ipe Page
User logout User management		frend Chart Page Camera
	A Haiwell	RFID

Figure 51 HMI The operation permission has been lost

【Other Settings】:

①Set the online cloud detection frequency

Enter the HMI background setting interface, click [Local Settings], switch to the [Other Settings] interface, click [Settings] on the [Set cloud online detection frequency], and select the required cloud online detection frequency.

	Settings	Back
	Settings Security Others Sounds	
1	Now channel server:Shenzhen, China Set	
	MqttAgency:	
	A Haiwell	RFI

Figure 52 Frequency of device cloud online detection

Cloud On-line	Detection	
Auto	10 min 20 min 30 min	
		Close

Figure 53 Frequency of device cloud online detection

(2)Set the current cloud server

Enter the HMI background setting interface, click 【Local Settings】, switch to the 【Other Settings】 interface, click 【Settings】 on the "Current Cloud server", select the cloud server address we need, then the current cloud server will be displayed as the selected server address. Click 【Automatic selection】 to automatically select the nearest cloud server address based on the IP address. Click 【Close】 to close the window.

	Settings	Back
	Settings	DUCK
	Settings Security Others Sounds	
	Cloud On-line Detection:Auto Set	
[Now channel server:Shenzhen, China Set	
	MqttAgency:	
		(A)
	Ara naiweii	RFID

Figure 54 Set the current channel server

Channel server select	
Qingdao, China Silicon Valley Frankfurt,	Germany Shenzhen, China
Singapore, Singapore Jakarta, Indonesia F	Bangkok, Thailand
Hongkong, China South Africa	
	Auto Close

Figure 55 Channel server selection

③MQTT agency

Click MQTT agent to enable or disable MQTT agent. When MQTT agent is enabled, HMI is used as a small MQTT server, and the server address is the Ethernet IP address or WiFi IP address of the device. Refer to the MQTT user manual for specific usage. After it is enabled, it will continue to be enabled until it is manually closed.

	Settings	Back
Settings Security	Others Sounds	
Cloud On-line Detect	ion:Auto Set	
Now channel server:S	henzhen, China Set	
MqttAgency:		
	🛦 Haiwell	RFID
ject browser 平 X Project pro	le 1:主画面 Data reporting server ver Select all 义 Delete	×
Project properties Project properties Select	Type Server host Port	Project identifier Description
Display □ Task □ Sevent	Server MQTT Server information configuration	~
Recipe	Server desc	Project identifier
History record	Server host	Port
Report Operation record Font manager	127. 0. 0. 1	1883
Finit manager	Client ID PN Code	~
Project language center	User info	ion
Cloud platform data monite	User name	Password

Figure 57 SCADA project server Settings

[Sound setting**]** :

Users can enable the Buzzer Switch, Power On Music, and Power On Text Music as required, and set the sound size.

(1) Buzzer switch

Enter the HMI background setting interface, click 【Local Settings】, switch to the 【Sound Settings】 interface, open the "buzzer switch", touch the device will make a sound "drip";

		Settings	Back
	Settings Security	Others Sounds	
	Веер		
1	Startup sound:		
	Volume:	18	
		Δ	
		A Haiwell	RFID

Figure 58 Buzzer switch

(2) Startup music

(1)Engineering property setting

Enter the HMI background setting interface, click [Local Settings], switch to the [Sound Settings] interface, turn on the "Startup music" switch, and play the configured music when the device is powered on.

	Settings	Back	
K	Settings Security Others Sounds Beep: Startup sound: Startup TTS: Volume: 18		
	Haiwell	RFID	

Figure 59 Start music

Open Haiwell SCADA(version 39.0 or above) and double-click ^{Project properties}, Enter the project properties interface, click **[**Boot option **]**, enable the boot music, and set the boot music: you can set the last device used music; You can also select "Custom" and click ^[] Import local audio and customize startup music. Users can choose whether to enable "Enter the project screen to stop playing" as required.

Project properties				? X
Basic information Cloud maintenance	Security CompanyInfo	Device server Settings Project attachment	Áccess More	Hire purchase Boot Setting
Boot Music Music Z Enable	'ustan Raa	Sound Text		
				Play
Enter the home p	page and stop pl	aying		

Figure60 Boot music custom Settings

When Factory is selected, select Clear custom music on the device to perform factory Settings and clear existing custom music.

Cloud maintenance	Security D CompanyInfo	vice server Settings Project attachment	Access More	Hire purchas Boot Settin
Boot Music Music ZEnable		Sound Text		
○ Last ○ Cusi	tom O Fact ic on the devi	e		Flay
Enter the home pag	e and stop pl:	ring		

Figure61 Boot music factory Settings

②Device Manager Settings

Open Haiwell SCADA(version 39.0 or above) and click, Enter the device Manager interface, enter the IP address of the device to be accessed, click [Manage], click [Boot Option], and click [Customize boot music] to set the device.

User's Manual of Haiwell D Series SmartLink HMI

Local Manager Clo	oud Manager			
Ferminal Name: HMI				Communication Timeout
Device IP: 192.168.13	D.2 🗸 Download Project Manager	Access to equipment	Auto refresh Refresh	Batch Update 3000 ms Setting
	Local manager		× Boot Options	2
ute Device IP	Device Info And Operate		n	
192, 168, 18, 49	Device alias 192.168.130.2		Customize the boot	soreen Restore factory boot soreen
-	Device Operateion		Curtoniza the heat	Puria
192. 168. 18. 63	Download Project	Upload Project	Customire the boot	
192, 168, 130, 2			Customize the boot so	and text
192. 168. 130. 3	Update the firmware	Update Time		
192, 168, 130, 4	Get Version	Upload History	Downl (Day a set of set	
			Boot Music	~
192. 168. 130. 8	Restart Device	Get the PN code	Downld O Vsing custom m	usic on the device
	Enable calibration	Boot Options	• Change custom	boot music
			- Play	
	Prestaution	7 :1	riay	

Figure62 Customize startup music

(3) Power-on text-to-voice

(1)Engineering property setting

Enter the HMI background setting interface, click [Local Settings], switch to the [Sound Settings] interface, open the "startup text voice" switch, and the text content set in the configuration will be announced when the device is powered on.

	Settings	Back
	Settings Security Others Sounds	
	Beep:	
f	Startup sound:	
	Startup TTS	•
	Volume: 🐗 💶 18	
		REID

Figure63 Power-on text-to-voice

Open Haiwell SCADA(version 39.0 or above) and double-click **Project properties**, Enter the project properties interface, click **[**Boot option **]**, enable text and voice, and enter the corresponding text content to complete the setting.

Basic information	Security	Device server Settings	Access	Hire purchas Boot Sottin
Sloud maintenance	CompanyInfo	froject attachment	More	boot Setting
Boot Music				
Music		Sound Text		
🗌 Enable		🔽 Enable		
		Welcome to Hai	well HMI!	
🖸 Last 🛛 🔾	Custom 🔷 Fac	tory		
				-
				Play
)	▼ Play
Enter the home	page and stop pl	Laying		▼ Play
Enter the home ;	page and stop pl	Laying)	Play
Enter the home	page and stop pl	laying		Play

Figure64 Text-to-speech Settings

⁽²⁾Device Manager Settings

Open Haiwell SCADA(version 39.0 or above) and click, Enter the device Manager interface, enter the IP address of the device to be accessed, tap [Manage], tap [Boot Option], tap [Customize boot voice text], and then you can set.

evice N	Manager Tool						– – ×
Local	Manager	Cloud 1	Manager				
Termi	nal Name: HMI						Communication Timeout
Devic	e IP: 192.1	68.130.2	∨ Download Project Manager	Access to equipment 🗌 Auto ref	fresh Refres	h Batch Update	3000 ms Setting
	11		Local manager		×	Post Ontions	
Route	Device IP		Device Info And Operate		Projec	bot options	~
	192.168.18.49	TVBOX	Device alias 192.168.130.2		oad	Customize the boot screen	Restore factory boot screen
	192.168.18.63	电梯电	Device Operateion		oad	Customize the boot music	Restore factory boot music
	192, 168, 130, 2	HMI	Download Project	Upload Project	oad	Curtonize the heat round text	
	192.168.130.3	CBOX	Update the firmware	Update Time	.oad	Customate the boot sound text	
	192.168.130.4	AB	Get Version	Valead History	end	Penetration	Manage
	192.168.130.8	TVBOX		· · · · · · · · · · · · · · · · · · ·	oad	Welcome to Haiwell HMI!	
			Restart Device	Get the PN code			
			Enable calibration	Boot Options			
			Penetration	File management		Flay OK	Cancel
 		a page a					

Figure65 Customize startup voice text

2.4 System information

(Restart the device) :

To restart the HMI, click [System Info] and select [Restart Device] on the HMI background Settings screen.

		Information	Back
1	Machine Code:7071149133810115017	LANI IP:192.168.130.2 ETHI MAC:1A:64:18:68:21:92	
		A Haiwell	RFID

Figure66 Restart the device

[Firmware Update] :

USB flash drive to update the firmware, enter HMI background Settings, click [System Info], select [Firmware Update], enter the firmware upgrade interface, select [USB], select the appropriate firmware update package, click [OK] to upgrade the firmware, after the successful upgrade, the device will restart.

1	Select Devic Select the project file:/新的 Machine DS Versi W Versi APP Versi Wirit Wirit	:k
	A Haiwell	RFID

Figure67 Firmware update

[Start screen calibration **]** :

Click [Enable screen calibration], the pop-up [Enable calibration will restart the device, do you want to restart the calibration?] Click Confirm to calibrate the touch screen.

	Information	Back
1	Machine Code:70711 Tips OS Version:vl. 0.59 Enabling calibration will restart the device. Do you restart the Version:HMI-T50 APP Version:3.40.0 Reboot Update Close OK Screen Calibration Wiring Diagram	•
	A Haiwell	RFID

Figure68 Start screen calibration

Specific calibration related operations Reference VIII. HMI calibration.

[Restore factory Settings**]** :

Click "Restore factory Settings" and a prompt box will pop up. "All configuration information will be cleared after factory Settings are restored. Click OK to restore factory Settings.

		Inform	mation		Back	
Machi OS Ve HW Ve APP V	ne Code:707114913381011501 rsion:vl. 0. 59 (01) rsion:HMI-T507-V2. 0 ersion:3. 40. 0. 34 Reboot Reset	7 🗐 L E Update iring Diagram	ANI IP:192.168.130 THI MAC:1A:64:18:6 Screen Cali	2 8:21:92 bration		
		Жн	laiwell	14	RFIÉ	3

Figure69 restore factory setting

Note: Restoring factory Settings cannot restore the binding information of the cloud Settings account. Please delete the device in the cloud APP/ cloud platform.

[Serial Port wiring diagram **]** :

Click 【Serial port wiring diagram】, the nine-pin serial port COM1/COM2 pin definition pops up.

	Seri	Information al port wiring diagram	Back
1	Machine Code:7071149133 OS Version:vl.0.59 (01) HW Version:HMI-T507-V2.0 APP Version:3.40.0.34 Reboot Wiring Diagram	COM1/COM2 1 - RS485 A+ COM2 2 - RS232 Rxd COM1 3 - RS232 Txd COM1 4 - NC 5 - Gnd 6 - RS485 B- COM2 7 - NC 8 - NC 9 - NC	•
		Close A Haiwell	RFID

Figure70 Serial port wiring diagram

2.5 Cloud Settings

Cloud Settings are used to bind devices to personal devices or enterprise devices. Ensure that the devices can properly connect to the Internet before using this function.

(1)Mobile cloud APP/ WeChat mini program download

APP:

Scan QR code to obtain directly.



Scan QR code to download APP

Haiwell

Haiwell Cloud

Figure71 APP or code download

WeChat mini program:

In the WeChat public number search Xiamen Haiwell, click to send a message, the chat box in turn select the hot spot - mini program, you can directly enter the small program.

13:20	.ıl 🗢 🕼	40.04		-	40.04	105	
<	Q	13:21		÷ 6	13:21	all 👻 🖬	
`	-	<	厦门海为 🖄	L			
▲ 厦门海为		据整内容:	设备恢复上线				
Laiwell 福建	C 🛛 🦉	JART JU	≪ 31 ne	ew messages			
海为科技是一家专业从事先进制造	、自动化和工业物联网领		Wednesday 17:38		Lo	ogin/Register	
域产品研发与销售的国家级高新技	术企业。主要产品有H >						
8original article(s) Channel: Haiwell		设备报警通	知				
14friend(s) following		报警设备:	Cloud Device		202	\otimes \ll	
Following	Message	报警时间:	2024-12-04 17:38:30		General	Update Share	
		报警变量:	-		-		
Articles Channel Services	5 =	报警类型:	EquipMentCondition##Re o	portInf			
Tuesday		报警内容:	设备离线				
Tuesday				-			
智联网关 XBOX	201 ⁼		09:26				
10 reaus	423						
		小程序 ⊘					
Tuesday		云 APP @	evice				
智联网关 CBOX		报警绑定 🦉	2-06 09:26:57				
19 reads		行业应用。	entCondition##Re	portInf			
		17 11 12 12 14				 Version 3.4.1 (776) 	
Tupsday		软件-APP-z	云平台 🛛 . 二残		ICP&	Regeneric and Privacy Policy 夏号: 闽ICP备11005201号-3A >	
Tuesuay							
A8智联 PLC		(三) 热点	产品	联系我们 =	Local Dev. Cloud E	Dev. Overview Message Mine	
TUreads	IIII						

Figure72 Cloud APP QR code download

Note: WeChat mini program does not have a local device, you need to download Haiwell APP. **②Haiwell Cloud APP/ mini program scanning code binding QR code**

Enter the HMI background setting interface, click [cloud setting], open the cloud switch, and the QR code and machine code pop up. If the cloud status is offline, check whether the HMI is successfully connected to the Internet.



Figure73 Bind cloud to set QR code

Log in the Haiwell Cloud APP on your mobile phone, enter the local device interface, and click the

upper left corner of the main interface button, Drop down the box and click to scan, scan the QR code to add the device. A confirmation dialog box is displayed on the device. Click **[OK]**, The device is successfully added and users can remotely access the device.

13:32		al 🕈 Đ	13:39		.ıl 🗢 🖸	13:40		.ıl 🗢 🕘
⊕ Q	Local Device		< Add	Personal Device		C Device Name	Edit Device	
문 Scan 상 Scanner Re	ecords		HMI 707114	Cloud maintenance 9133810115017	enabled	Cloud Device		8
	_					Location		
								•
						Audit type		
						 AKey + BKey AKey + Passv 	audit vord audit	
No device is	s found. Please	try again				Remark		
	Search							
						Delete		Save
Local Dev. Cloud Dev	v. Overview Me	99+ ssage Mine	Cancel	Confirm	n			

Figure74 APP Bind device



Figure 75 HMI Cloud Settings determine binding

		Cloud		Ba	ick
	Cloud Switch:	User Name	Type	Account	C
	Device Name:Cloud Device	降	АКеу	173****7472	
ſ	Achine Code: 7071149133810115017 🗐 Cloud Maintain: Enable				•

Figure 76 HMI Cloud Settings binding information

③Remote monitoring and control

Open the Haiwell Cloud APP on your mobile phone and enter the cloud device; Find the corresponding device and enter, click [Direct access] in the lower right corner, you can access the device remotely. If the current project allows remote operation, the user can remotely control the device through the mobile phone.



Figure77 APP remote access

2.6 Network Settings

HMI supports a variety of network connection modes Ethernet, WiFi, 4G, through different networking modes, so that the HMI connected to the Internet, remote access, remote operation, remote transparent transmission operation.

(1)Ethernet connection

Enter the HMI background setting interface, click [Network Settings], enter the Ethernet setting interface, and open [Network switch]. The network type includes DHCP and Static IP.

Dynamic IP: Connect the network cable, select [DHCP], and click [Save]. The device automatically obtains an IP address.

	Network	Back
	Ethernet 4G Routing set Net check	
	Bridge: Save ²	
	Switch:	
	Type: DHCP Static IP	
I	Local IP: 192. 168. 130. 184 Set up success	
	SubMask: 255 . 255 . 0	
	Gateway: 192 . 168 . 130 . 3	
	AlteDNS: 223. 5. 5. 5	
	A Haiwell	RFID

Figure 78 Dynamic acquisition IP

Static IP: Connect the network cable. Select [Static IP] for the network type. Enter the correct IP address, subnet mask, default gateway, and DNS. Click [Save].

	Network	Back
1	Ethernet 4G Routing set Net check Bridge: Save ² Switch: 1 Type: DHCP Static IP Local IP: 192. 168. 130. 2 Set up success	
	SubMask: 255 255 0 Gateway: 192 168 130 3 AlteDNS: 223 5 5 5	•
	A Haiwell	RFID

Figure79 Static setting IP

Process tip: After the HMI network port is plugged into the network cable of the external network, enter the background Settings - [network Settings], and obtain the IP address dynamically first, select [DHCP] and then click [Save], it will automatically obtain the IP address and make the HMI for the external network. Then select [Static IP] to change the IP address, and click [Save]. (2)WIFI Settings

Click **[**WIFI Settings **]** to enter the WIFI setting interface, which supports connecting to the network through WIFI. Enter the WIFI setting interface, turn on the WIFI switch, select the target WIFI account, enter the correct WIFI password, and connect to the WIFI network after verification.

					Ne	etwo	rk						Back	
Ethernet Wi	fi	AP		Routi	ng se	t	Net c	heck			6	>	Daon	
Switch:			1	naiweil	(lengt)	1 betwe	en 8 ar	id 20)						
CHOOSE A NETWORK.	%	!	-	+	=	_	\$	#	*	•		H.		
	0	1	2	3	4	5	6	7	8	9		L6		
	q	w	e	ſ	t	У	u ;		0 1	p		H		\$
		s z	a x	r c	y v	n b	J N	к m			&			
									<u> </u>					
						Haiv	vell						R	FI®

Figure80 wifi Password setting

After the connection is successful, a green check mark is displayed " \heartsuit ".

	Network	
thernet	Wifi AP Routing set Net check	
Switch:	IP:192.168.100.5	
0	Haiwell-Guest	≈ 0
CHOOSE A NETW	IORK	
	Haiwell-Lab	n
	Haiwell	*
	ddl	<u>.</u>
	17楼最强wiFi	ି ।

Figure81 wifi Connection successful

After the connection is successful, gray is displayed "¹", Click the gray i icon, you can set the IP address, subnet mask, default gateway, DNS static or dynamic. After setting, click [Save] to set the IP address of WIFI. Click "Ignore this network", that is, disconnect the WIFI connection, if you want to use the WIFI, you need to re-enter the password to connect.

					Net	work				Back	
E	thernet	Wifi AP	R	outing	g set	Net chec	k				
	Switch:	Type:	DHCP	Stati	ic IP	1			1		
	0	Local IP:	192 .	168	100	5					
	CHOOSE A NETW	SubMask:	255	255	254 .	0					
		Gateway:	192 .	168 .	100 .	1					
		AlteDNS:	114 .	114	114 .	114					
						Ignore wifi	Save	Close	N.		

Figure82 wifi ip Settings

Note: ① The HMI needs to be connected to the WIFI antenna, otherwise the signal strength is weak and the WIFI cannot be connected or searched.

2 WIFI can only search the AP band 2.4GHz, 5GHz cannot be searched, if you use a mobile phone

to open WIFI hotspot, please pay attention to set the hotspot band.

③Personal hot spot

Click [Personal hotspot] to enter the personal hotspot interface, the HMI built-in network card can also share the WIFI hotspot for other users. Turn on the personal hotspot switch, set the hotspot name and password, and you can share the WIFI hotspot for other users.

		Network	Back
Е	Cthernet Wifi	AP Routing set Net check	
	AP: IP:10	. 5. 5. 1	
	Wifi Name:	НМІ-142090-50023	
f i	Password:		
		Save	
		A Haiwell	RFID

Figure 83 Personal hotspot Settings

Set the hotspot name, click "Hotspot name", the hotspot name input box is displayed. Enter the hotspot name, click Enter, and then click Save to save the added hotspot name.

						Ne	etwo	rk						Back	
	Ethernet	Vifi	AP		Routi ^{The}	ng se hot nar	t ne leng	Net c	heck 18)			•	8		
	AP:	%	1	-	+	=	_	\$	HMI-	*	,	3 @			
1	Password:	0 9	1 W	2 e	3 r	4 t	5 У	6 u	7 i	8 0	9 P				•
		a	s z	d x	f c	g v	h b	j n	k m			ے۔ چ			
			_	_	_	•							J		
	And the se						Haiv	vell						R	FID

Figure 84 Personal hotspot Settings name

Set the password, click "Password", the password input box appears, click the upper left corner ^{OD} of

the input box to switch the plain text and cipher text of the password. Enter the password, click **[**Enter**]**, and click **[**Save**]** to save the added password. The factory default WIFI password of the HMI is empty.

						Ne	etwo	rk					Back	
	Ethernet	Vifi	AP		Routi	ng se	t	Net c	heck			×		
	AP:	@	The 1	ength o	of the	passwo:	rd must	be 8	20 or n	o passi	word			
	Wifi Name:	%	!	- <	+		_	\$	#	*	,			
1	Password:	0	1	2	3	4	5	6	7	8	9	$\langle X \rangle$		
		q	w	е	r	t	у	u	i	о	р			٠
		а	s	d	f	g	h	j	k		+			
			z	x	с	v	b	n	m	_	_	∆ ^{&}		
				•										5
							Haiv	vell					F	RFID

Figure 85 Personal hotspot setting password

Note: The hotspot name contains 6 to 18 characters, and the password can be left blank or 8 to 20 characters. Click Enter to enter the hotspot name, the password will not be displayed in the corresponding position, and a pop-up prompt will be displayed.

44G configuration

Click **【**4G**】** to enter the 4G configuration interface, which contains two modes: internal eSIM card and external SIM card. Users can identify or obtain the relevant information of the device and its SIM card through three codes: IMEI (International Mobile Equipment Identity Code), IMSI (International Mobile User Identification Code) and ICCID (Integrated Circuit Card Identification Code).

4G not enabled: turn off the 4G switch and the message "Closing..." is displayed. If only the IMEI code is displayed, the device is not connected to the 4G network.

	Network	Back
	Ethernet 4G Routing set Net check	
	4G: IMEI: 865947078535222	
1	Closing	
	XG XG	
	A Haiwell	RFID

Figure 86 4G is disabled

Enable 4G: Turn on the 4G switch and pop up the "4G Option" pop-up window. Users can click "Enable built-in eSIM" or "Enable External SIM Card" as required. After clicking, the pop-up message "Closing..." will be displayed. , "Setting succeeded", the device can access the 4G network.

	Network	Back
ſ	Ethernet 4G Routing set Net check 4G:	
19		
	A Haiwell	RFID

Figure 87 Enabling 4G

eSIM card mode: When the eSIM card mode is enabled, Using is displayed on the right of the eSIM card information, and you can view the built-in eSIM card information.

	Network	Back
1	Ethernet 4G Routing set Net check 4G: Signal: High C Mode: • eSIM eSIM(using Data:4126M Remaining data:3050.623M Remaining data:COSM IMEI: 865947078 IMSI: 4600447117 ICCID: 898604271	•
	APN: Default Cmmet DNS: 112. 5. 230. 54 Set	
	A Haiwell	RFID

Figure 88 Enabling the eSIM card

Click [View data] to display the total data and remaining data of the eSIM card in this period.

		Network	Back
	Ethernet 4G Routing set	Net check	
	4G: Signal: High C		
ſ	occi o cont Data: 4126M eSIM(usine Remaining data: 3050 IMEI: 865947078 IMSI: 4600447117 ICCID: 898604271	i0. 623M Close	•
	APN: Default cmnet DNS: 1	112 . 5 . 230 . 54 Set	
		A Haiwell	RFID

Figure 89 Viewing data

SIM Card mode: When the SIM card mode is enabled, "In Use" is displayed on the right of the SIM card information, and information about the external SIM card can be viewed.

	Network	Back
Ethernet 4G Rou	ting set Net check	
4G: Signal: High C		
Mode: OeSIM	• SIM	
eSIM	SIM(using)	
IMEI: 866145069160253		
ICCID: 8986031724592021159	96 View data	
APN: Default cmnet	DNS: 218. 85. 157. 99 Set	

Figure 90 Enabling the SIM card

Click 【View data】, if the SIM card is not the Internet of Things card provided by Haiwell, the prompt "Failed to obtain data" will pop up.

	Network	Back
Ethernet 4G Routin	ng set Net check	
4G: Signal: High C		
Mode: eSIM	SIM	
eSIM	Failure to acquire data	
IMEI: 866145069160253 IMSI: 460110806584566 ICCID: 89860317245920211596	View data	
APN: Default cmnet	DNS: 218. 85. 157. 99 Set	

Figure 91 Viewing data

APN Settings: Click Default on the APN. You can select Default or Custom. If you select Custom, you can modify the APN (Network access point) name, user name, password, and dial number as required.

Ethernet 4G Routing set Net check 4G: Signal: Choose S Customize Mode: eSIM Defa *APN User Name Password Dial number Password INSI: 4601108065 Dial number (e.g., "egg###1"@g" +00") ICCID: 898603172 Dial number (b.g., "egg###1"@g" +00") APN: Default DNS: 213. 85. 157. 99 Set		Network	Back
APN: Default cmnet DNS: 218. 85. 157. 99 Set	Ethernet 4G 4G: Signal: Mode: eSIM IMEI: 866145069 IMSI: 4601108065 ICCID: 898603172	Routing set Net check Choose 5 Customize •APN •APN User Name •APN Password • Dial number (e, t, *e00***1°ot *00*) Cancel OK	
	APN: Default	cmnet DNS: 218. 85. 157. 99 Set	

Figure 92 APN Settings

DNS Settings: Background 4G DNS Settings function, to achieve self-configuration of DNS, to solve the 4G network automatically obtain probabilistic DNS anomalies, resulting in the 4G network cannot be used.

Click **[**Settings **]** on the DNS page, the DNS configuration pop-up window is displayed. You can select the DNS server assignment mode. You can customize the DNS server assignment mode by selecting Manual.

Ethernet 4G Routing set Net check 4G: Signal: High C Mode DNS type DNS address: DHCP Satic IME DNS settings: 112, 5, 230, 54 IMS ICC		
Mode DNS type DNS address: DHCP Satic IME DNS settings: 112. 5. 230. 54 IMS ICC		
	ose	•
APN: Default cmnet DNS: 112. 5. 230. 54 Set		

Figure 93 DNS Settings 1

Click the DNS server address input box to modify the value of the address.

	Network	Back
Ethernet 4G Rout	ing set Net check	
4G: Signal: High C	MAX.	
Mode DNS type		
DNS address: DHCP Sa	7 8 9 🖾	
IMS	4 5 6 +/_	Save Close
	1 2 3	
APN: Default cmnet		
	A Haiwell	RFID

Figure 94 DNS Settings 2

After setting the DNS server address, click [Save] to save the DNS server address.

		Network	Back	
	Ether	net 4G Routing set Net check		
	4G:	Signal: High C		
	Mode	DNS type		
f		DNS address: DHCP Satic		•
	IME IMS ICC	DNS settings: 112 - 5 - 230 - 54		
	APN:	Default DNS: 112 . 5 . 230 . 54 Set		
		A Haiwell	RF	-1D

Figure 95 DNS Settings 3

The DNS server is configured successfully. Procedure

	Network	Back
Ethernet 4G Ro	uting set Net check	
46: Signal, High C		
Wile		
Mode: 0 651M		
eSIM	SIM (up success	
IMEI: 866145069160253		
IMSI: 460110806584566 ICCID: 898603172459202115	596 View data	
APN: Default cmnet		
APN: Default cmmet		
APN: Default Cmnet		
APN: Default cmmet		

Figure 96 DNS Settings 4

Note: DNS information is not displayed when the signal strength is "No Service".

	Network	Back
Ethernet 4G	Routing set Net check	
4G: Signal: High	С	
Mode: OeSIM	O SIM	
eSIM	SIM(using)	
IMEI: 866145069160253		N. (
ICCID: 898603172459202	11596 View data	
APN. Default	et DNC- 210 05 157 00 5-1	
	DIG. 218. 03. 101. 53 380	

Figure 97 DNS not displayed

5Network configuration model

The new series HMI is available in the following four models with different network configurations. **Standard version (example: A7pro)**

The HMI Standard Edition only has Ethernet, does not include WiFi/4G/ hotspot/routing module, and is only provided by the network cable.

WiFi version (example: A7pro-W)

The HMI with WiFi version only includes Ethernet and WiFi, does not include 4G/ hotspot/routing

module, and is provided by network cable /WiFi.

With 4G version (example: A7pro-G)

HMI with WiFi version includes Ethernet and 4G and routing module, does not contain WiFi/ hot spot, provided by network cable /4G, routing mode is: not enabled routing mode /4G client mode, about the specific use of each routing mode will be explained later.

4G with WiFi version (example: A7pro-GW)

HMI with 4G and WiFi version includes Ethernet /WiFi/4G/ routing module, which provides the network by Ethernet /WiFi/4G. The routing modes are: not enabled routing mode/wireless access point mode /4G routing mode/client mode/relay mode /4G client mode. The specific use of each routing mode will be explained later.

6Route configuration

Route configuration not only supports the device to access the Internet through LAN, WIFI, and 4G modes, achieving "device Internet access". In addition, you can share a LAN or directly create a hotspot to provide external network connections.

80				Network	70)		Back	
	Etherne	t 46 Rou	ting set	Not check Routing set		×		
	Routi	Device internet acc	ess: L/	AN 4G				
1	Device	Device internet sup	ply, L	hotSpot				•
	Device			Opening	Save	Close		•

Figure 98 Route Settings

Route Disabled mode: On the HMI background Settings screen, tap Network Settings to enter the route configuration screen. Disable the route switch. , and hides the Internet access and external network information of the device. In this case, the routing mode is disabled.

In Route Disabled mode, only the routing function of the current Ethernet, WIFI, and 4G is disabled. In this mode, the hotspot supports only the local area network (LAN) and does not support the Internet. The function Settings of Ethernet, WIIF, and 4G remain unchanged.

	Network	Back	
	Ethernet 4G Routing set Net check		
	Routing mode:		
11	Closing		
	A Haiwell	RFID	

Figure 99 Disable routing mode

Wireless access Point mode: Enter the HMI background setting screen, click [Network Settings] to enter the route configuration screen, turn ON the route switch, and the setting screen will pop up (it will pop up when the switch is set to ON from OFF, otherwise you need to click "Setting" to enter the setting screen), set the device Internet access mode to "LAN", set the external network supply mode to "Hotspot", and click "Save". The message "Setting succeeded. 4G and WIFI have been turned off for you." is displayed. "Is set to wireless access point mode.

In wireless Access Point mode, only the wired network provides the network. Other devices can connect to the personal hotspot of the device to access the LAN and the external network.

		Network		Back
Etherne	+ Wifi AD D	Routing set	×	
Pautie	Device internet access:	LAN VIFI 4G		
Device	Device internet supply:	LAN hotSpot		
Device			Save Close	
		A Haiwell		REID

Figure 100 Wireless access point mode

4G routing mode: Enter the HMI background setting screen, tap **[**Network Settings **]** to enter the routing configuration screen, turn on the routing switch, tap "Settings", set the device Internet access mode to "4G", set the external network mode to "hotspot", click "Save", and the pop-up message "Setting succeeded, WIFI has been turned off for you." In this case, the routing mode is set to 4G.

In 4G routing mode, only 4G provides the network for the device. Other devices can connect to the personal hotspot of the device to access the LAN and the Internet. The wired network in this mode supports only LAN networks.

		1	Network			Back
Etherne		Routing	outing set	hook	×	1
Doutin	Device internet access:	LAN	WIFI	4G		
KOULII	Device internet supply:	LAN	hotSpot			
Device						
Device				Sa	ve Close	

Figure 101 4G routing mode

Relay Mode: Enter the HMI background settings interface, click on **[**Network Settings**]**, enter the routing configuration interface, turn on the routing switch, click "Settings", select "WIFI" for the device's internet access mode and "Hotspot" for the external network supply mode, then click "Save". A prompt will pop up saying "Settings successful, 4G has been turned off for you." At this point, the device is set to relay mode.

In "Relay" mode, only the network provided by the connected WIFI hotspot is available. First, connect to a hotspot with internet access, then use this device's personal hotspot to provide network access to other devices. It supports both local area networks and the external network. In this mode, the wired network only supports local area networks.

	Network	Back
	Ethernet Wifi AP Pouting set Nat shock Routing set	×
1	Device internet access: LAN WIFI 4G Routi Device internet supply: LAN hotSpot Device Device Save Clo	ISB T
	A Haiwell	RFID

Figure 102 Relay Mode

Client mode: Enter the HMI background settings interface, click on [Network Settings] enter the routing configuration interface, turn on the routing switch, click "Settings", select "WIFI" for the device's internet access mode and "LAN" for the external network supply mode, then click "Save". A prompt will pop up saying "Settings successful, 4G has been turned off for you." At this point, the mode is set to client mode.

In "Client" mode, the network is provided by the hotspot connected via WIFI. In this case, the HMI acts as a router. The HMI is connected to the wired network, and then the device can be provided with a network through the wired connection. Personal hotspot function is not supported in this mode.

			Network		Back
	Etherne	H Wifi AD	Routing set	×	
1	Routin Device	Device internet access. Device internet supply:	LAN WIFi 4G LAN hotSpot		
	Device			Save Close	



4G Client Mode: Enter the HMI background settings interface, click on **[**Network Settings**]**, enter the routing configuration interface, turn on the routing switch, click "Settings", select "4G" for the device's

internet access mode and "LAN" for the external network supply mode, then click "Save". A prompt will pop up saying "Settings successful, Wi-Fi has been turned off for you." At this point, the mode is set to 4G Client Mode.

In the "4G Client" mode, the network is provided by 4G. At this time, the HMI acts as a router. The HMI is connected to a wired network, and then connected to the device through a wired connection to provide the network for the device. This mode does not support the personal hotspot function.

		Network		Back
Etherne+	Wifi AD D	Routing set	×	
Dev Routin	vice internet access:	LAN WIFi 4G		
Devic:	vice internet supply:	LAN hotSpot		
Device			Save Close	

Figure 104 4G Client Mode

⑦Network diagnosis

External network Access: Use network diagnosis, click on the URL section, select the URL for access. If information is returned, it indicates that the device is connected to the network.

Ethern Routi Devic	Network Net check Web Site: www.baidu.com reference www.baidu.com PING www.baidu.com (36.155.132.76): 56 data bytes 64 bytes from 36.155.132.76: seq=0 ttl=50 tim=58.659 set 64 bytes from 36.155.132.76: seq=1 ttl=50 tim=69.945 set 64 bytes from 36.155.132.76: seq=2 ttl=50 tim=58.376 set 64 bytes from 36.155.132.76: seq=3 ttl=50 tim=69.945 set 64 bytes from 36.155.132.76: seq=3 ttl=50 time=69.945 set 64 bytes from 56.155.132.76: seq=3 ttl=50 time=69.945 set 65 bytes from 69.945 set 65 bytes from 69.155 set 66 bytes from 69.155 se	Back
	A Haiwell	RFID

Figure 105 External Network Access

Local Area Network Access: Use Network Diagnostics, click on the URL field, and enter the corresponding IP address of the device you want to access. For example, the IP address of the HMI communication PLC is 192.168.13.212. If the following information is returned, it indicates successful access and communication.

	Network	Back
Etherne Routin Device Device	Net check Web Site: 192.168.130.6 ping PINe 192.168.130.6 (192.168.130.6) (192.168.130.6) Of bytas from 192.168.130.6 (192.168.130.6) (192.168.130.6) Of bytas from 192.168.130.6 (192.1128.130.6) (192.168.130.6) Of bytas from 192.168.130.6 (192.1128.130.6) (192.1128.130.6) Of bytas from 192.168.130.6 (192.1128.11an=0.264 ms) 192.168.130.6 (192.1128.11an=0.264 ms) 192.168.130.6 (192.1128.11an=0.264 ms) 192.168.130.6 (192.11128.11an=0.264 ms) 192.168.130.6 (192.1168.11an ms) 19	
	A Haiwell	RFID

Figure 106 Local Area Network Access

VI Scada project connection 1. Project establishment

This article takes the creation of a new project as an example to realize the Ethernet communication between HMI and Siemens 200smart, and it can also achieve local and remote access to the HMI screen to control the PLC.

1.1 New project

Step 1: Open the Haiwell Cloud Configuration SCADA software and click "Create a New Project" on the initial page of the configuration software.

-			
Haiwell Cloud Scada[3.40.0.11]			
Project(P) Edit(E) View(V)	Debug(D) Tool(T)) Help(H)	
🗄 🕂 🗧 🛛 🔩 🕨 Online simular	tion(F5) ▷ Offline sim	mulation(F6) 192.168.130.2 🔹 👻 🚺 💆 💹 🖳 🔍 🖓 🛷 🐚 🗓 🗄 🖽 🖽 🔛 🔛 🔛 🖳 🖳 🖳 🖳 🖳 🖳 👘 🕮 🎄 🔟 🖉 🎼	클린
) + C (🕯 🔪 A	A☆ - (?) @ @ Δ - ヹ - ≡ - ≡ - ≒ - 宋体 - ■ - B Z U 100% -	
Project browser	Start page 🛛 🗙		
	Start		
	Chaota a nam ma		
	create a new pro	oject	
	Open a project .		
	Run a project	•	
	Open recent project	vts:	
	Project name	Project file path	
	■未命名工程 ■ キークエ程	C:\Users\ChenBingHei\Desktop\109%eb progan(backup).hvdev C:\Users\ChenBingHei\Desktop\109%eb progan(backup).hvdev	
	▶ 未命名工程	C:\Users\ChenBingMei\Documents\Haiwell Scade\Temporary\工程2.hwdev	
	▶ 未命名工程	C:\Users\ChenBingMei\Documents\Haiwell Soada\Temporary\工程1.hwdev	

Figure 107 New Project

Step 2: After clicking "Create a New Project", a project property window will pop up. The project name can be customized. Select the corresponding operating platform. Here, taking D7 Pro-G as an example, select Haiwell HMI D7 Pro (models with tail numbers -W, -G, or -GW all share the same operating platform). After selection, you can see the screen resolution of the used device. You can choose the corresponding angle according to actual needs. If the angle is not set, it will default to 0°. Select "Local Area Network Access" to enable the local area network access function. You can use the Haiwell Cloud APP, computer browser, or TVBOX for local area network access and viewing. The password can be left blank, meaning no password is required for access. Finally, click "OK".

New project			?	\times
Product and an end to a				
froject properties				
Product and				
froject name				
Unnamed project				
Runtime platform				
Haiwell HWT A7				
Haiwell HMI A7 Pro				
Haiwell HMI AIU				
Haiwell HMI A10 Pro				
Haiwell HMI B/				
Haiwell DWI DTD				
Haiwell HMI C7S				
Haiwell HMI C7H				
Haiwell HMI B10				
Haiwell HMI B10S				
Haiwell HMI C10S				
Screen recolution	Apgla(°)			
	Juiga C ()			
1024x600 ~	0		~	
Conen LAN access				
open and doorna				
Please enter the access 🗌 Show				
rassword allowed to be empty				
			-	-
		OK	Cance	et –

Figure 108 Select the Operating Platform

1.2 Newly constructed equipment

Step 1: In the **[**Project Browser **]**, select Ethernet, right-click and choose "Add Device", then click "OK" to complete the addition.



Figure 109 Add Device

Step 2: Select Ethernet (TCP/IP) for the device interface. On the left, choose the device and find the corresponding Siemens model. Fill in the IP address of the Siemens PLC in the device properties.



Figure 110: Set Device Communication Parameters

1.3 Create new variable

After clicking "OK" to add a device, a prompt box will pop up asking whether to define variables for the device immediately. Select "Yes", and add one Q0.0 and one VW0.0 respectively.

🚼 Haiwell Cloud Scada[3.40.0.11] - (C:\Users\ChenBingMei\Do	cuments\Haiwell Sca	ada\Temporary\Pro	ject1.hwdev				
Project(P) Edit(E) View(V)	Debug(D) Tool(T)	Help(H)						
🗄 🕂 🕶 🔂 🦺 🕨 Online simula	ation(F5) 🕨 Offline simu	lation(F6) 192.1	68.130.2 🔹 🖣	- 📑 🛤 🛤	• • • • •	1.11日日1日	6 6 % J	111日本 日本 日
IN RID-OZOOC	A / CO-	\$- @) @ Q	<u>ð</u> - <u>/</u> - ≡-	≡- =- ⇒- 宋体		-	• B Z	<u>U</u> 100%
Project browser 4 X	Project profile	Siemens_S7_20	0CN_SMAR ×					
Unnamed project	Device properties	Add Batch add	Delete Online	Off Select All Re	everse Select			
Project properties Device	Register type (All)	• Da	ita type (All)	- Group	(All)	- Search		
	Variable nome	Register type	Address format	Register address	Bit address	Address length	Data type	The mode of reading a
Ethernet	1 90_0	Q(Digital output	Decimal		0	0	1 Bool	Read and write
CloudDataCenter	▶ 2 VW0	VW(Variable memo	Decimal		0		2 Integer	Read and write
MQTT	*							
- 🖉 Slave device	*							
Device classification								
🚊 🗩 Variable								
🖃 🥜 External variables								
Siemens_S7_20								
🛷 Internalvariable								
A Claure unstable								

Figure 111: Create a New Variable

1.4 Editing screen

On the main screen of the engineering browser, in the symbol library on the right - functional

components, drag the "Bit Setting" and "Numeric Display Input" symbols onto the screen, and double-click the symbols to bind the variables.

Haiwell Cloud Scada[3.40.0.11] - Project(P) Edit(E) View(V)	C:\Users\ChenBingMei\Documents\Haiwell Scada\Temporary\Project1.hwdev		- a ×
: the Doline rimul	tion(5) 🗅 Offine rimulation(56) 192 168 130 2		
		U UU% • English	
Project browser 4 X	Project profile Siemens_S7_200CN_SMAR 1:Main_display* X Va Cut(Ctrl+X	er Task manager User group manager	Graphics library A X
Contained project			Favorite Common
Project properties			Functional components Switch
Serial port			Lamp varve Tarik Motor blade
P Ethernet			InstrumentsOurcor Traceless Dine
Siemens S7 20			Trace-Rine Shane-Ranel
- Ø CloudDataCenter			Environment-Nature Sign-Symbol
- Ø MQTT			Safety Sign_ Daily Other
- 🖉 Slave device			
Device classification			
😑 🗭 Variable	Q0_0		Dial lawore Dial avoidable
😑 🦿 External variables			bit tanp bit switch
Siemens_S7_20	-88888		
InternalVariable			
 System variable 			Word Jamp Word paitch
Slave variable	0		
Direlay			4
1-Main denlay			
Task			Multistate Numeric
Script task			switch input/display
O Variable set task			
Event			
			Text Real time data
🌮 Display show event			input/display input/display
🌮 Display hidden ever			
🌮 Variable change ew			
			Function Picture
Administrators			button operat
- Admin			A. TENT
Powerliner			
Children Lisers			Graphics Text
🎍 User			
- kecipe			
- Alarm			
- History record			Move shape Rotating shape
🔁 Data group			and the second sec
Report			A.
- Operation record			
All Font manager			Image panel
RFID			
Shape Ibrary			
Project language cente			
B- X Perprerai			

Figure 112 Editing Screen

If you need to write VW values on the HMI, you must select the "Input" option in the numerical display input property; otherwise, it will only have read-only attributes.

ol name NumShowIput_1	Symbol name NumShowIput_1
.c Advanced Shape Common	Basic Advanced Shape Common
+tting	Setting
.ead variable <u>Address bind</u>	Read variable Address bind 🕑 Display t
iemens_S7_200CN_SMART_1.VW0	Siemens_S7_200CN_SMART_1.VW0
] Input	✓ Input
Write variable is different from reade variable	☐ Write variable is different from reade variable
HILE FAILADEC IS ALLEL CALL IN HILE CALL, FAILADEC	Written veriable Address kind Taft label
(a)	(b)



1.5 Debug and run

The developed and edited project can be run and debugged through "Online Simulation" and "Offline Simulation".

🚼 Haiwell Clo	ud Scada[3	.40.0.11] - (:\Users\ChenB	lingMei\Do	cuments\Ha	iwell Scada\Temporary
Project(P)	Edit(E)	View(V)	Debug(D)	Tool(T)	Help(H)	
i 🕂 🕶 🛛 🔜	🛛 🕨 On	line simula	tion(F5) 🕨 C	Offline simu	lation(F6)	192.168.130.2
🕨 🗟 🗖	• 0 /	$\diamond \diamond c$	2+PC (` A	C3 • (?)	€
Project brows	er		Project pr	rofile	Siemens	_S7_200CN_SMAR
🖃 🚽 Unname	d project					

Figure 114 Simulation Debugging

The difference between online simulation and offline simulation:

Online simulation: Treat the port on the computer as the port of the HMI touch screen to communicate with the PLC and other devices for simulation and debugging.

Offline simulation: That is, without communicating with the actual PLC, only simulate and operate the interface.



Figure 115 Online/Offline Simulation Screen

2. Equipment management tool

Open the configuration design end of the computer, click on the device management tool icon in the menu bar to enter the device management tool; or click on [Programs], expand the [Haiwell Scada] installation file, and click on [Haiwell Cloud HMI Manager] to enter



the device management tool. It supports effective control of HMI through both local management and cloud management.

2.1 Local management

In local management, users can select devices based on their IP addresses within the local area network and perform management operations.

Local Manager	Local manager		×		
Terminal Name: HMI D	levice Info And Operate			c	ommunication Timeout
Device IP: 19	Device alias 192.168.130.2		refresh	Batch Update 3	3000 ms Setting
	Device Operateion				
ioute Device I	Download Project	Upload Project	Download Project	Penetration	Operate
192. 168. 18. 4	Update the firmware	Update Time	Download	Penetration	Manage
192. 168. 18. é	Get Version	Upload History	Download	Penetration	Manage
192, 168, 130.	Restart Device	Get the PN code	Download	Penetration	Manage
192. 168. 130.			Download	Penetration	Manage
192. 168. 130.	Enable calibration	Boot Options	Download	Penetration	Manage
192. 168. 130.	Penetration	File management	Download	Penetration	Manage

Figure 116 Local Manager

2.2 Cloud management

In cloud management, users can log in via mobile phone or email. Device administrators and owners can manage the current device, but ordinary users do not have device management permissions. Users can log in to the device manager by entering the correct account and password. After logging in, users can select a specific device and perform management operations.

Local Manage	er Cloud Manager	Local manager	>
Ferminal Nam	ne: HMCI	Device Info And Operate	
Device IP:	192.168.130.2 V Download Project Manager	Access to equipment A	68. 130. 2
		Device Operateion	
		Download Projec	t Upload Project
out:	n	ng Project Name	
Phone	e Login Email Login Setting	程 Update the firmwa	are Update Time
	Phone:	疑回 程 Get Version	Upload History
_	86 17359287472		
•		程 Restart Device	Get the PN code
	fassword:	ANALA- project	
-	Remember Password	Enable calibrati	on Boot Options
		Penetration	File management
	Lorin	程	

Figure 117 Cloud Manager

3. Project download

3.1 Local download

Step 1: Enter the device management tool. You can choose to use local management or cloud management. Find the corresponding HMI and click "Download Project".

roject browser ####################################	orofile Siemens_S	7_200CN_SMAR	1:Main_display	× Variable	manager	Task manager Use	r group manager			Graphics lib Favorite-Comm Functional com Lamp Valve Advanced cont Instrument Ou Togethern 6	irany non sponents Switch Tank Motor-Blac trols arsor Traceless-P
Event	Device	Manager Tool							- 0 X	Environment N Safety-Sign	lature Sign-Symb Daily-Other
- & Rece Alam - Hatory record - Data group - Report - Report	Term: Deri-	inal Sane: 1001 re IP: [192.14	Cloud Manager 8.130.2 v Downloa	d Project N	fanager ka	ccess to equipment 🗌 Auto	refresh Befresh	Batch Update 3	Comminstive Tineout as Setting	Bit lamp Word lamp	Bit switch
Shape library Project language center	Boute	Device IP	Terminal Name	Device Type	Firmsare	Running Project Hame	Download Project	Penetration	Operate		
Peripheral Data reporting server		192.168.18.49	TVBOX	TVB034	1.0.82.217	TVbox工程	Invaload	Fenetration	Manage	Multistate	Numeric
Cloud platform data monito Audio Audio		192. 168. 18. 63	电梯电视2	TVB084	3.38.82.182	TVbex工程	2 Download	Functration	Manage		
- S OPC DA		192.168.130.2	ни	A7 Pro-G	3.40.0.34	未命名工程	Bownload	Penetration.	Manage	Text input/display	Real time data input/display
		192.168.130.3	CB0X	CBOX	3.39.2.39	Vinnamed project	Download	Penetration.	Manage		
		192.168.130.4	84	84	3.39.11784.7	YSI-#8	Bownload	Fenetratico.	Manage	Function	Picture operati
		192.168.130.8	TVBOX	TVB034	1.0.82.215	TVbex工程	Brwnload	Fenetration	Manage	A	TEXT
										Graphics () Move shape	Text C Rotating shape

Figure 118 Local Download Project

Step 2: On the download interface, you can choose whether to retain historical and alarm records, whether to retain recipes, and whether to download fonts as a package according to your needs. The default options are usually fine. Just click "OK".

Local	and a set	Cloud Manager		Project download confirm			
Terminal Name: HMI Device IP: [192.168.130.2] Download Projec				Project Name: C:\Users\ChenBingHei\Desktop\Runtime\Unnamed project.harun	Batch Update	Communication Timeout Batch Update 3000 nz Setting	
				Equipment IP: 192.168.130.2			
loute	Device IP	Terminal Name	Dev		Penetration	Operate	
	192. 168. 18. 49	TVBOX	TVBOX-	Device Password:	Penetration	Manage	
	192.168.18.63	电梯电视2	TVBOX-	Initial Configuration	Penetration	Manage	
	192. 168. 130. 2	HMI	A7 Pr	Reservations formula 🛛 Reserve the operate records	Penetration	Manage	
	192.168.130.3	CBOX	CBOX	Reserve the power-off protection	Penetration	Manage	
	192.168.130.4	AB	AB	Reserve history and alarm records Reserve attachment	Penetration	Manage	
	192.168.130.8	TVBOX	TVBOX-	OK Cancel	Penetration	Manage	
				2			

Figure 119 Project Download Confirmation

Step 3: Wait for the prompt "Download successful!" to pop up, click "OK", and then the new project can be run on the HMI.

Prompt	×	
j Download success!		
ок		

Figure 120 Download successful
3.2 Remote download

Step 1: To use cloud management, the HMI needs to be connected to the Internet and the cloud must be online. Log in to the cloud APP with your account and password, find the bound HMI, and then select to download the project.

Device Manager] Local Manager	Tool Cloud Mana	ger						- 0
User Name: My Personal dev: PN code/Devi	k ices 🗸	Search					Ва	Communication Timeout Logout tch Vpdate 30000 ms Setting
Device Name	Machine Code	evice Typ	Online	Firnware	Remark	Download Project	Penetration	Operate
loud Device	7071149133810115017	A7 Pro-G	• Online	3. 40. 0. 34		Download	Penetration	Manage

Figure 121 Remote Download Project

Step 2: The subsequent steps are consistent with the local download, and will not be outlined in detail here.

4. Project program operation

After the project download is successful, wait for the HMI to restart. After the restart is successful, the touch screen will automatically open the project startup screen, set the toggle to on, and the numerical display will show an input write value of 10. The PLC monitoring can be observed to see successful writing.



Figure 122 HMI operation screen

Address	Format	Value	New Value	
1 CPU_Output0	Bit	2#1		
2 VW10	Signed	+10		
3	Signed			
4	Signed			
5	Signed			



5. Local/Remote Access HMI Screen

5.1 PC local/remote access

PC local access:

Method 1: After downloading the project locally, if the "Run LAN Access" option is selected in the project properties, you can enter the HMI IP in the browser and press Enter to access the HMI screen locally (such as: 192.168.13.202)





Method 2: In the device management tool, simply click on "Access Device" to automatically pop up the browser LAN access device.

ų	设备管理	理工具									\times
	本地	管理 - 국管	理								
	终端 设备:	а; нип 192.168.13.	202 ~ 下载工程	管理	টান	设备		批重更新	通讯超时 3000 ns	设置	1
				_							
	线路	设备IP	终端名	型号	固件版本	运行项目名	下载工程	透传	操作		
			HEI	D7pro-G		测试工程	下载工程	透传	管理		
				0							





PC remote access:

Step 1: Open a computer browser and enter https://ecloud.haiwell.com Visit the Haiwell Industrial IoT Intelligent Cloud Platform, log in with your account and password, select 'Personal User' to enter the platform.



Figure 127 Login to Haiwell Industrial IoT Intelligent Cloud Platform



Figure 128: Selecting Individual Users



Haivell Personal Uber Overview All 1 Device Center 111 0 Device List Operation Records Alarm Center Operation Records	PN Coder/Device Name/Project Na Card Status V Reset Search V
Overview All 1 Device Center 111 10 Device Center 111 10 Operation Records Identified and project Aarm Center Identified and project Overview Identified and project Operation Records Identified and project	PR CaderDevice Name/Project Na Card Status V Reset Search V
Device List Operation Records Value Center Color Course C	
Alam Center	
Accel Conter 7071149133810115017	
Asset Center	
Camera Configuration - SIM 1186/ (412) 202 day day	
) Cloud Data Center	
I I I I I I I I I I I I I I I I I I I	



Step 3: Click on "Access Project" in the device details to remotely access and enter the HMI screen.



Figure 131 Remote Access HMI Screen

5.2 Remote access on mobile devices

Open the Haiwell cloud app or WeChat mini program on your phone, log in with your account and password to enter the cloud device, select the corresponding HMI device, and finally click "Direct Access".

16:09	al 🕈 🗊	13:46		I 🗢 🕼	14:12		al 🗢 🕼	16:10		al 🗢 Đ
<	5	⊕ Clo	oud device -	8	<	Cloud Device		<	Cloud Device	\$
		Q PN code, Device	name, Remark							
Welcome to Haiwell C	loud	Recently All 111		>						
Password Code		Cloud D 7071149	evice 133810115017							
+86 1	8	1	No more data		HM Online	未命名工程	C B FI			
•••••	0				Device	e Info Members	Alarms			
Login Register Read and agree Service Agreem Privacy Policy Other ways	ent and	Found 2 devices nearth	oy- View D Duerview Messae	etais 📀	Device Name Audit type PN Code Owner Location Remark Maintenance IoT Card	Cloud Device AKey + BKey audit 707114913381011507 陈	7 🗋 3345 (Vew/Top up Access		10	

Figure 132 Mobile Remote Access HMI Screen

VII Remote transparent transmission PLC

This article takes Siemens 200smart transparent transmission as an example. After successful Ethernet communication between HMI and PLC, perform the following steps to achieve the function of remotely downloading PLC.

1. Modify the network segment of the computer supply network

Open the computer settings and click on [Change Adapter Options]

Network and Sharing Center					-	
\rightarrow \checkmark \uparrow \clubsuit \rightarrow Cont	trol Panel > Network and Internet > Network	work and Sharing Center	~	C Search Contro	ol Panel	,
Control Panel Home	View your basic network inform	nation and set up connections				
Change adapter settings	view your active networks					
Change advanced sharing settings	adc.com Domain network	Access type: Internet Connections: MLAN (Haiwell)				
Media streaming options						
	未识别的网络 Public network	Access type: No Internet access Connections: Q 以太网 2				
	Change your networking settings					
	Set up a new connection or ne Set up a broadband, dial-up, c	etwork or VPN connection; or set up a router or access point.				
	Traublashaat meblama					
· · · ·	Diagnose and repair network p	problems, or get troubleshooting information.				
Con las						
See also						
Windows Defender Firewall						
Windows Delender Filewall						

Figure 133 Open computer settings

If the computer's network supply method is Ethernet, it is necessary to check the IP network segment of the Ethernet network supply, so that the Ethernet IP network segment and the PLC network segment cannot be the same (for example, if the PLC's IP is 192.168.14.133, the computer's Ethernet network segment needs to be modified to be different from 14).

Network Connections				- 0	×
ightarrow $ ightarrow$ $ ightarrow$ Control Panel	> Network and Internet > Network Connections >		∨ C Search	Network Connections	P
rganize Disable this network device	Diagnose this connection Rename this connection	View status of this connection	Change settings of this connect	ion 🗄 💌 🗖	3
WLAN adc.com Realtek 8821CE Wireless LAN 802 以太の 2 Network cable unplugged TAP-Windows Adapter V9	基牙网络连接 Not connected Bluetooth Device (Personal Area	以太网 羽络 2 ealtek PCle GbE Family Controller			
			No.5		
			No p	eview available.	

Figure 134 Check the supply network segment 1

🚇 以太网 Status	× 🛛 🚇 以太网 Properties 🛛 🗙	Internet 协议版本 4 (TCP/IPv4) Properties X
General	Networking Sharing	General
Connection IPv4 Connectivity: Internet IPv6 Connectivity: No network access Media State: Enabled Duration: 00:03:52 Speed: 100.0 Mbps	Connect using:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. The network segment must be different from the PLC network segment to avoid IP conflict Obtain an IP address: IP address: IP address: IP address: IP address: IP address:
Details Activity	 ✓ Microsoft 网络的文件和打印机共享 ✓ GoS 数据包计划程序 ✓ Internet 协议版本 4 (TCP/IPv4) ✓ Microsoft 网络追鼠器多路传送器协议 ✓ Microsoft 网络追鼠器多路传送器协议 ✓ Microsoft LDP 协议驱动程序 ✓ Internet 协议版本 6 (TCP/IPv6) 	ocorret mask: 255 . 255 . 0 Default gateway: 192 . 168 . 130 . 1 Obtain DNS server address automatically • Use the following DNS server addresses:
Bytes: 65,799,011 1,226,553,298	Install Uninstall Properties Description 传統時効用性が少に使用性は、 でのののでは、 のののののでは、 ののののののでは、 のののののののでは、 のののののののののの	Preferred DNS server: Alternate DNS server:
Properties Oisable Diagnose Clos	协议,用于在不同的相互连接的网络上通信。	Validate settings upon exit Advanced
	OK Cancel	

Figure 135: Checking the Supply Network Segment 2

TIP: If the computer has WIFI function, the network supply method can prioritize using WIFI before performing VPN transparent transmission operation.

2. Open the device management tool

After successful communication between the HMI and Siemens 200smart based on the previous project, open the SCADA configuration software - Tools - Device Management Tool, select Cloud

Management, and perform transparent device transmission.

ned project	t profile Siemens_5/_200CN_SMAK I:Main_display × Vana	ble manager – Task manager – U	ser group manager		
oject properties evice iriable External variables	Device Manager Tool 2			- 0 X	
Siemens_S7_200Cf InternalVariable System variable Slave variable Variable classification	User Mane: K Ferronal devices ∨ F# code/Device Hane Search		Com Batch Update	aunication Timeout Logout 30000 ns Setting	
spay usk vent ser security clop	E E E E E E E E E E E E E E E E E E E	e Remark Download Project	B Penetration	Operate	
arm arm astory record ata group aport aparation record	Cloud Device 7071148133810115017 A7 Fro-G • Online 3.40.0.3	Dovnload	Penetration	Manago	
en autor record ont manager FID nape library oject language center					
ripheral ata reporting server oud platform data monito udio PC UA					

Figure 136 Open Device Management Tool

3. Connect transparent transmission devices

Use the device management tool - Cloud Management for VPN transparent transmission, log in to the cloud account, select the corresponding smart connected device - and connect the device.

	oud penetration VI.4.16				- 0
Equipment Equipment :	information name: Cloud Device		PN Code: 707:	1149133810115017	
ansparent	transmission equipment	list			
ID	1 Device	Device type	Communication type	Station address	IP
1	Siemens_S7_200CN	S7-200	тср	1	192.168.14.133
Penetratin PLC Device	ng information	2			
Penetratin PLC Device Node:) I	ng information :: :: :ndirection () Immediat	2 e • VYX			

Figure 137 VPN connection transparent transmission device

After connecting the device - select the corresponding PLC, the transparent transmission mode defaults to intermediate mode. In this article, select VPN and click start transparent transmission. Fill in the IP address and create a virtual IP address through the touch screen.

Equipment n	ame: Cloud Device	PN Code: 7062749132810191011	
ransparent t	ransmission equipment	list	
ID 1	Device 西门子PLC_1	Device type Communication type Station address	IP 192.168.130.6
tter an IP addre s the PLC IP ad oes not conflic or example, the 92.168.14.250	ess in the same network s dress and ensure that the t with other IP addresses. e IP of the PLC here is (IP does not conflict).	IP address 192 168 130 250 Subnet mask 255 255 0 0 Transmission port OK OK Cancel Do not modify network parameters during transparent transmission! 255	ter the IP subnet mask of the PLC
Penetrating PLC Device: Mode: In Connection	; information direction O Immedia status: Ready to pene	te 💿 VFN trate	

Figure 138 Fill in information for VPN transparent transmission

Attention: Click to start transparent transmission. VPN parameter settings will pop up. The virtual IP address you need to set up here is not the same IP address as the PLC. The IP address you need to fill in is in the same network segment as the IP information of the PLC device that needs VPN transparent transmission, and there is no IP address conflict with the LAN where the PLC device is located; Fill in the subnet mask information corresponding to the IP information of the PLC device or fill in 255.255.0.0. After filling in, click confirm.

4. VPN status check

After completing the above operations and entering transparent transmission, it is necessary to perform a status check on the VPN. Open the computer settings and click on 【Change Adapter Options】.

A Haiwell 海为[®] en.haiwell.com

🚆 Network and Sharing	Center				I X
$\leftarrow \rightarrow \checkmark \uparrow$	Secontrol Panel > Network and Internet > Net	work and Sharing Center	~ C	Search Control Panel	Ą
Control Panel Home	View your basic network inform View your active networks	mation and set up connections			
Change adapter settir Change advanced sha settings Media streaming opti	iring adc.com Domain network ons	Access type: Internet Connections: WLAN (Haiwell)			
	未识别的网络 Public network	Access type: No Internet access Connections: Q 以太网 2			
	Change your networking settings Set up a new connection or m Set up a broadband, dial-up, o Troubleshoot problems Diagnose and repair network	etwork or VPN connection; or set up a router or access point. problems, or get troubleshooting information.			
See also Internet Options Windows Defender Fi	rewall	٠			



Find the Ethernet (Ethernet 2 in this case) where the virtual network interface TAP Windows Adapter V9 displayed as an unrecognized network is located, double-click to enter the "Ethernet 2" interface.

Network Con	nections				- 0	>
\rightarrow \rightarrow	↑ 😰 > Control Panel	 Network and Internet > Network Connections 		~ C	Search Network Connections	þ
Organize 🔻	Disable this network device	Diagnose this connection Rename this connection	View status of this connection	Change settings of this	s connection 🗄 🔹 🗖	(
WLAN adc.c Realt	N om ek 8821CE Wireless LAN 802	蓝牙网络连接 Not connected Bluetooth Device (Personal Area	以太网 Network cable unplugged Realtek PCle GbE Family Controller			
未识 和P-1	M 2 别的网络 Windows Adapter V9					
					No preview available.	
tems 1 iter	m selected					E

Figure 140 Open virtual network card

Click on **(**Detailed Information **)**, to check the IPv4 address and IPv4 subnet mask information in the pop-up 'Network Connection Details' page. When both are consistent with the VPN parameter settings, transparent transmission of PLC devices can begin.

🚇 以太网 2 Status	×	inection	Network Connection Deta	ils ×
General			Network Connection Details:	:
Connection IPv4 Connectivity: No Internet access IPv6 Connectivity: No network access Media State: Enabled Duration: 00:06:21 Speed: 10.0 Mbps	- *	C	Property Connection-specific DN Description Physical Address DHCP Enabled IPv4 Address Ir v4 Subnet Mask	Value TAP-Windows Adapter V9 00-FF-E7-4E-EF-28 Yes 192.168.130.250 255.255.0.0
Details	,	-	Lease Obtained Lease Expires IPv4 Default Gateway IPv4 DHCP Server IPv4 DNS Server	2024年12月17日 16:53:42 2025年12月17日 16:53:42 192.168.0.0
Sent — Received Packets: 594 0			IPv4 WINS Server NetBIOS over Tcpip En Link-local IPv6 Address IPv6 Default Gateway IPv6 DNS Servers	Yes fe80::4d2f:61ff:aa4e:57f0%18 fec0:0:0.ffff::1%1 fec0:0:0.ffff::2%1
Close				Close

Figure 141 Checking virtual network card IP information

Attention: When the query result shows that the generated TAP Windows Adapter V9 network interface is connected to an unrecognized network and the IPv4 address and IPv4 subnet mask information in its right-click status - detailed information are consistent with the VPN parameter settings, it is possible to start transparent transmission to the PLC device.

(The above is the VPN status query method for Windows 10 system version. For Windows 11 version, simply click "Settings -->Network and Internet -->Advanced Network Settings" to query relevant network information.)

5. Transparent transmission PLC

Open Siemens programming software and click to go online. Select the TAP Windows Adapter V9 network interface driver in the pop-up window to connect. Click to search for CPU, and a PLC that can be connected online will appear. If not, you can manually input the IP address of the PLC by adding a CPU.

		Project1 - STEP 7-Micro/WIN SMART	- 0 X
File Edit View Import Import Import Import Imp	RC Debug Tools Help dt * Preview Project dt * Project Project Project	Craste Copen Falder Monitor Leareier COSIMI	3
Main 7 Project1 What's New	O O M Detect - Download - Legiment - M2 C MAIN x SBP_0 - MT_0 Progen Comments Main Comment	mm。◎如何也是有意义的,如果是是有关的。 ● · · · · · · · · · · · · · · · · · · ·	
CPU 5140		Communications	×
System BUCK Communications Communications Contractions Forvales Bull Copic Cook	2 Este connert	Communication Interface Prestite VCL G&F Favily Controller.1707P.Auto.1 Prest the "Edit" Suttion to drarge the IP data and station name of the elected C/U. Prest the "Static Aught" C/079.1 DIACont Ethernet Adapter.1709.1 DIACont Ethernet Adapter.1 DIACont Ethernet Ad	
Communications Sompare Convert Convert Soft Counters Floating-Point Math Soft Integer Math Soft Integer Math Soft Integer Math Soft Cocied Operations	3 Este connect	Predity CPL 024 Farsy Controls (1007 Auto.) P Address International Controls (1007 Auto.) P Address International Controls (1007 Auto.) International Controls (1007 Auto.) VirtualBox Host Only Ethemet Adapter. (1079 Auto.) International Controls (100 Auto.) VirtualBox Host Only Ethemet Adapter. (1079 Auto.) Sobre Hoad. Sobre Hoad. Sobre Hoad. Opfield Columny Opfield Columny	
Move Program Control Shift/Rotate Shift/Rotate Move Table Table Table		[392, 380 - 10 - 1 Station Name (ASCII characters = 4, 0-9, - and .)	
PROFINET Parent Development Pare	5 Erter comment	Pred Ciru Add Ciru Edit Ciru Delete Ciru OK Canodi	
	Erite connert		
	Symbol Table Symbol Table (2 + K) + □ (4 + F) + □ (2 + F) + □ (4 + F) + □ (2 + F) + □ (4 + F) + □ (2 + F)	0 × bissiste fatos ⇒ X ≜ Address Spebd VV 1	a Type Data Type Connext A
Project Tree	Symbol Table Status Chart Data Block	🐨 Variable Table 🔤 Cross Reference 🗜	Output Window Output Window Output Window

Figure 142: Selecting V9 Communication Interface

Select the IP device connected to Siemens SMART PLC, double-click on the corresponding IP to connect to the PLC.

		Project1	- STEP 7-Micro/WIN SMART		- σ ×
File Edit View	PCC Drbug Tools Hep of Upland Download post Upland Download Taanfer Rev Rev Plant Download Taanfer Rev Rev Rev Plant Download Rev Rev Rev Rev Rev Rev Rev Rev Rev Rev	Folder GSDML Management est GSDML			Ø
Main	3 🔾 🔾 🦉 🖕 Upload - 🐥 Download - 🏥 Breat - 박웃 Deletz - 5) / · · · · · · · · · · · · · · · · · ·	⁺→ 非○□ □·∷፤፤ ■		
Port I we the second seco	I Pagas Connect: I Pagas Connect: I Menols Connect:	emmunications extended to the second of the	X Press the Tail' botton to drage the IP data and attain name of the sected CUI. Press the Tailor to transactly that the total transactly the total transactly that the total transactly that the total transactly that the total transactly transactly the total transactly transactly transactly the total transactly t		
	C		a X Mariable Table		>
	11-11-11-1 1-11-11-1		3316		
	H + + H Table 1 System Symbols (NO Symbols NO Symbols	and .	Address Symbol Ver Type	Data Type Comment	Û
Port of Texa	Symbol Table III Status Chart III Data Block		🔂 Variable Table 📗 Cross Reference 🕟 Output	t Window	
Project life	Hot connected				

Figure 143: Searching for CPU

After successful connection, you can see the connection status below and proceed to download the PLC project.

	Project1 - STEP 7-Micro/WIN SMART	- 0 ×
Corrections Control Co	Create Copen Folder Signation Wanayout Cooker Cooker	
tein · · · · · · · · · · · · · · · · · · ·		
And Constant Con		

Figure 144 Check connection status

Attention: VPN transparent transmission supports normal transmission even in case of communication failure between PLC and Haiwell Smart-Link products;

VPN transparent transmission supports all PLC devices within the same local area network as the IP address parameters set by transparent transmission;

If you need other models of PLC transparent transmission tutorials, you can refer to them in Haiwell College - Learning Zone - Special Column 5 (Special Column | Haiwell College).

VIII HMI calibration

Optimizing the startup calibration mode is to ensure accurate correspondence between touch points and display positions when using HMI, improve operational accuracy, and help adjust deviations caused by environmental changes, hardware aging, or replacement.

1. Enter calibration mode

Method 1: HMI local background settings directly enter calibration mode

Long press the top right corner of the touch screen for five seconds to enter the background settings, click on **[**System Information **]**, and then click on **[**Start Touch Calibration **]** to enter the calibration mode interface.

Terminal Name:	🖨 English		
Project Network			
Settings			
Cloud Back			
LAN:192.168.130.2(using)			
Figure 145 Click on System Information			
Information	Back		
Machine Code:7071149133810115017 🗐 LAN1 IP:192.168.130.2			
OS Version:v1.0.59 (01) ETH1 MAC:1A:64:18:68:21:92			
HW Version:HMI-T507-V2.0			
APP Version: 3. 40. 0. 34			
Reboot Update Screen Calibration			
Wiring Diagram	-		

Figure 146 Click to start touch screen calibration

If the calibration of the touch screen fails, you can operate it according to the following methods.

Method 2: HMI power off, restart, enter background settings, and recalibrate.

Step 1: Enter the background settings

During the HMI startup phase, long press any position on the screen for 10 seconds to automatically enter the background settings. If the HMI screen is not long pressed for 10 seconds and then released, it will directly enter the project screen.



Figure 147: Press and hold for 10 seconds to enter calibration 1

Step 2: Enter calibration mode

Press and hold for 10 seconds at any position on the HMI background settings interface to enter calibration mode. If the user enters the background settings through other means, long pressing the HMI screen will not enter calibration mode.



Figure 148: Press and hold for 10 seconds to enter calibration 2

Method 3: Enter the HMI backend settings through the Haiwell APP on the mobile phone

Open the Haiwell cloud app on your phone and access the HMI device on your local or cloud device. Taking the cloud device as an example, go to the corresponding HMI device and click on background settings - system information - start touch calibration.

16:19	uli 🗢 🚺	16:20	sılı 🗢	E D	16:20	al	? 🗊
< Cit	oud Device	< Clou	d Device	43	<	Cloud Device	۲
		Terminal Name:	슬 Eng	lish		Information	Back
		Project	Network		Machine Co OS Version: HW Version	de:7071149133810115017 🗐 v1.0.59 (01) :HMI-T507-V2.0	
Online Un Device Info	named project C 🔠 🗹 Members Alarms	Settings	Information		APP Version	:3.40.0.34 2.168.130.2	
Device Name Clour Audit type AKey PN Code 70711 Owner 陈	1 Device + BKey audit 49133810115017 🔋	Cloud	Back		ETHI MAC: Rel Up	:1 A:64:18:68:21:92 Doot date	
Remark Maintenance Enab IoT Card 8986	led 04271024D0053345 (View/Top up	LAN:1	92.168.130.2		Screen C Wiring	alibration Diagram	
Settings	Access	0					

Figure 149: Haiwell APP on mobile phone starts touch screen calibration

Method 4: Accessing HMI background settings through computer LAN

HMI and computer are on the same local area network and have the same network segment. You can enter the HMI IP/setting (such as 192.168.13.202/setting) in the browser to access the HMI background settings - System Information - Start Touch Calibration.



Figure 151 LAN startup touch screen calibration 2

Method 5: Configure software to start calibration mode for local/cloud devices

HMI and computer are on the same local area network and have the same network segment. Open the configuration software and click the button above to access the device management tool , Select the corresponding HMI for local or cloud management, click on "Manage" and select "Enable Calibration".

wser 4 × Project prof	ile 1:Main_display ×			A. 1		
evice ariable splay						
1:Main_display	Device Manager Tool				-deadard-ada	– – ×
vent	Local Manager	Cloud Manager	Local manager		×	
Display show event			Device Info And Operate			
Display hidden event Variable change event	Terminal Name: HMI		Device alias 192.168.130.2		C.	mmunication Timeout
Event_1 Event_2	Device IP: 192.168	1.130.2 V Download Pro	oj Device Operateion		Batch Update 3	00 ms Setting
er security						
dpe rm			Download Project	Upload Project		
tory record	Route Device IP	Terminal Mane	1 Undate the firmware	Undate Time	Peneration	Operate
port	192. 168. 18. 49	TVBOX TV	vi		Penetration	Manage
eration record nt manager	192.168.18.63	电梯电视2 14	Get Version	Upload History	Penetration	Manage
D						
ject language center	192. 168. 130. 2	HILL A	Restart Device	Get the PN code	Penetration	Manage
ipheral ta reporting server	192. 168. 130. 3	CBOX CE	Enable calibration	Boot Options	Penetration	Manage
ud platform data monito	192.168.130.4	A8 A8	8		Penetration	Manage
no CUA		81864 B	Penetration	File nanagement		
	192. 168. 130. 8	TYBUX IV	vi		Penetration	Manage

Figure 152 Configuration software startup touch screen calibration

2. Operation calibration mode interface

In the calibration mode interface, the calibration cross symbol appears in the upper left corner of the screen, Long press the cross for one second until you hear a beep and release it, then enter the next calibration position. Calibrate the device touch screen in the order of "top left, top right, bottom right, bottom left, and center". If the calibration is successful, the HMI will restart.



Figure 153 Calibration Interface

IX Common Problems

1. What is the factory IP address for HMI?

The default IP address for the HMI factory is 192.168.1.112. If you need to modify the IP address of the HMI, please refer to V. HMI Settings -2. HMI Background Settings -2.6 Network Settings.

2. How to download projects locally from HMI?

Local download project: HMI and computer are on the same LAN and the computer network segment and HMI network segment need to be consistent. Open the configuration software - Device Management Tool - Local Device, and finally find the corresponding HMI in the list and click Download Project.

Local Upload Project: The HMI and computer are on the same local area network, and the computer network segment and HMI network segment need to be consistent. Open the configuration software - Device Management Tool - Local Devices, find the corresponding HMI in the list, select Management to enter the Local Manager, and finally click Upload Project. (The project is disabled from uploading by default. To set the upload function for the project, open the configuration software, click on "Project" - "Project Properties" - "Security Settings", and select "Allow Upload Project" to set the upload password.)

3. What is the password for uploading HMI factory demonstration project?

The upload password for the D-series HMI factory demonstration project is DHMI or HMI.

4. Is there any other way to enter HMI background settings besides on the screen?

Method 1: Local Area Network Access

① Computer side: In the local area network, HMI can also be accessed through a browser, provided that the computer is in the same local area network and on the same network segment as HMI. Enter device IP+/setting (example: 192.168.11.123/setting) to enter the background settings interface.



Figure 154: Computer Browser LAN Access Background Settings

⁽²⁾Mobile end: If there is a model with a WiFi version of the HMI, the mobile WiFi can connect to the HMI's built-in hotspot, then open the Haiwell cloud app - Local Device, find the HMI device, and if the local device does not appear, you can go to the top left corner of the local device then enter the IP address 10.5.5.1 of the hotspot to access the device interface.

		Network	Back
	Ethernet Wifi	AP Routing set Net check	
-	Wifi Name: Password:	НИГ-142090-50023	
		Save	•
		Alaiwell	RFID

Figure 155: Personal Hotspot Names



Figure 156 Mobile LAN Access

Method 2: Access to engineering graphics elements

In Haiwell Cloud Configuration SCADA, select the advanced graphics element, pull out the "Function Button" of the graphics element, double-click to enter the properties, choose the 【Enter System Device】 function, download the project to HMI, and click this button to enter the background settings.

d project	Function button		? ×)	Favorite-Common
ce ce	Sunbol name Fundtn 1			Functional component Lamp Valve Tank
able lay	Batis Show Tart Common			Advanced controls Instrument-Cursor
1:Main_display	Satting	Tata true		Trace Pipe Shape 1
	function			Safety Sign Dalyd
security	Enter system setting	V B Sistery		
e	×	B Alan Matan		0
y record		ALATB DISTORY		Bit lamp Bi
group		Diffe and the second se		
ation record		Contraction of the second		
nanager		🗌 Resipe		Word lamp Wor
a library				
ct language center				
eral	Belease action to take effect			Multistate N switch inpu
platform data monito	Confirm box			
	Confirm text			
^	Make xure to perform the current operation.			Text Real input/display inpu
	Company Look			
	Lack variable differen bi			
	LICE PERSONNEL PROVINCE PROVINCE PROVINCE	Safaty central		button op
		Bable (Currently Mini programs cannot use this feature)	Mininum keystroke time	45
			3.0 ~	
	Lork legie	Tiner display tine	Timer display notition	Graphics
	O OF lock O OFF lock		No. and share	
				More charge _ R
		Sound Setting		
		Play audio before execution	Play the andio after execution	A5.
		Pre-execution andio	Post-execution audio	Image page
		Sound Library	Sound Library	
0.000				a x

Figure 157 Configuration Screen Enters System Settings

5. Can I download programs from HMI's USB and how can I download them?

Can be downloaded.

Step 1: Open the configuration software to enter the project, click on the configuration software menu bar - Project - Generate USB Run File, and copy the USB run file to the USB drive.

Step 2: Insert the USB drive into the USB port of the HMI, and press the upper right corner of the HMI display area for a long time to enter the background settings - local settings - project download - select generate USB drive run file to download successfully.

Refer to V. HMI Settings -2. HMI Background Settings -2.2 Engineering Settings.

6. How to deal with unstable serial communication or offline communication reports between HMI and 485 devices?

Communication failure:

Step 1: Check if the communication wiring is connected correctly, and if necessary, use a multimeter to measure if the pins of the line correspond. Then check if the communication protocol of the device (COM port, device station number, communication type, baud rate, data format, etc.) is configured consistently in the configuration engineering.

Step 2: If all the above checks are correct, you can first use third-party tools to communicate with the device, such as using Modbus poll to check if communication can be successful. If not, it is possible that the device is not a standard Modbus protocol and belongs to a non-standard device, which may not be able to communicate.

Unstable communication:

Step 1: The communication timeout and packet length of the device can be adjusted. It is recommended to set the communication timeout to 1500ms and the packet length to 10, as shown in the following figure.

A Haiwall Cloud Scada 2 40.0	111 - Ollicar ChapPingMo	Darkton) Inn	and project 1.1.1 kurdey	
D i vm s lives vć	an DI (D) T (C		led project I I i invoev	
Project(P) Edit(E) View	(v) Debug(D) Tool(i) Help(H)		
: 🜵 🗧 📲 🕨 Online si	mulation(F5) > Offline s	imulation(Fb)	192.168.130.2 • 🐳 📑 🔂 🛤 🛄 🔇	* * * * * * * * * * * * * * * * * * *
N A □ - O / ◇	_ಂ+೧೧ ≜ 🔪	A 🕄 • 🕅	<u>२ </u>	. • 12 • B ∡ ∐ 100%
	× Project profile	1:Mair	display* ×	
🖃 💑 Unnamed project			Property Setting	? ×
Project properties				
Device			and an information in the second s	allast and comminate Out
B-V Sena port			Device information computication port	Other
C Ethernet	Device Properties		Collect and communicate	
CloudDataCt	Delete Device		Priority Normal spec	ed frequency(ns)
- Ø MQTT	Variable Import		0 🗘 300	•
🖉 Slave device	Variable Export		High speed framenou(as) Low speed d	framency(hr)
Device classi		-	Ange speer inequality (0.5)	a equeloy (na)
Variable			50 1000	
Display			Communication timeout(ms) Collection	attempt times
Tack			150	
Event				
User security			Communication detect times Attempt int	terval (ms)
🛓 Redpe			3 💠 2000	÷
🐥 Alarm			Pullance sulling Processes	a suiling
- 🕙 History record			Fulling Accounted in	in culling
			3 💠 0	÷
Operation record			High and Low Word Block lengt	th
- Na Font manager				
- KFID				
🜔 Shape library			Address offset Communicati	on interval(ms)
Project language cente	¥		base 0 V 0	÷
Peripheral			waters and a set	
Data reporting server			Datch write instructions	
Cloud platform data mi	STILC		Supported 🗸	
OPC UA				
			Cat denias maniables	ult sumstand OK Canal
			Set device variables Aestore dera	un parameters on Califer

Figure 158: Modifying Collection and Communication Parameters

Step 2: Do not place the power line and 485 line in the same cable tray. Use shielded wires, magnetic rings, filters, etc. to take anti-interference measures.

7. HMI can communicate with other instrument devices such as flow meters and electric meters normally, but the values read are different. How to handle this?

The default high and low byte order of HMI devices is CD AB, which needs to be adjusted according to the byte order of the device. If you don't know what the byte order of the device is, you can first use the third-party tool Modbus poll to adjust different byte orders to correspond to different values.

The configuration engineering modifies the byte order position of the device as shown in the following figure.



Figure 159: Modifying Collection and Communication Parameters

8. How to unbind the machine owner Akey in HMI cloud settings?

Scenario 1: The Akey identity of the user is known and the login account is available Mobile: Open the Haiwell Cloud app/WeChat mini program, click on the corresponding device in the cloud device to enter device details, and then click on the top right corner $\stackrel{\text{E}}{=}$ enter the editing device and finally click to delete the device. (If the device contains other users, you need to delete them first before removing the device.)

On the computer side, enter the Haiwell cloud platform system (ecloud. haiwell. com) through the browser. After logging in, click on the device center - device list, enter the device details for the corresponding device on the right, and finally click on delete device.

Scenario 2: Unable to contact the owner A key

If the machine owner A key cannot be contacted, restoring the HMI factory settings is useless. Please contact the corresponding sales representative in the region for unbinding processing.

9. How to troubleshoot if HMI cloud settings are not online?

Step 1: Go to the device background and click on Network Settings - Network Diagnosis. Enter the address cloud.Haiwell.com to test if the device is pinging and confirm if it can connect to our server. If it is not possible to troubleshoot the device's network supply issue, you can continue troubleshooting by following the steps below.

Step 2: In the background interface, select "Local Settings" - "Other Settings" and click on "Settings" on the current channel server. For example, switch from the Shenzhen server to the Qingdao server, or switch from the Qingdao server to the Shenzhen server.

Step 3: If it is a 4G network supply, you can try turning off the switch or setting DNS to 223.5.5.5.

10. How to deal with HMI displaying no service in the background when placing 4G card?

Step 1: Check if the 4G card status, data balance, and internet access are normal. If the 4G card is a targeted card, domain name binding is required. (Domain Name Reference Appendix)

Step 2: When the HMI is powered off, place the 4G card with the chip facing the pins.

Step 3: Long press the upper right corner of the HMI for 5 seconds to enter the background settings - network settings -4G, turn on the 4G switch, and check if the interface information can read card number, signal strength, and other information normally.

Step 3: Long press the upper right corner of the HMI for 5 seconds to enter the background settings - network settings -4G, turn on the 4G switch, and check if the interface information can read card number, signal strength, and other information normally.

Step 4: Background settings - network settings - network diagnostics. Use the diagnostic tool to select www.baidu.com (Haiwell cloud: cloud. haiwell. com) to ping whether the connection can be normal. If the device can ping cloud.haiwell.com, the device cloud status is offline, return to the background settings - local settings - other settings, and click to set the current server channel switch (Chinese Mainland switches to Shenzhen, China or Qingdao, China, and other countries or regions select Hong Kong, China, or a server channel closer to it)

11. How to handle HMI WiFi connection failure?

Step 1: Check if the WiFi antenna of the HMI is installed properly, and place the antenna close to the signal source.

Step 2: The HMI requires a WiFi frequency band of 2.4GHz.

Step 3: The WiFi name and password do not contain spaces or special symbols.

12. How to deal with VPN transmission failure to connect to PLC?

Step 1: Check if the computer network segment is in the same network segment as the PLC. If so, it is recommended to modify the computer network segment or switch to another network supply method (WIFI).

Step 2: Check if the IP address of the virtual network card created by the computer firewall and antivirus software is correct.

Step 3: After completing the above steps without any errors, the computer can uninstall the VPN tool. The uninstallation file path is: C:\Program Files\OpenVPN, Double click Uninstall.eve to uninstall VPN. Next, open the configuration software and the VPN tool will be automatically reinstalled when performing VPN transparent transmission operation. Finally, follow the normal transparent transmission operation steps.

13. How to handle RTSP cameras that can display images but cannot be controlled?

Attention should be paid to the resolution of the camera, which is recommended to be 1920 * 1080P or below, and the frame rate should be 25fps or below. If it reports "ONVIF verification failure or network abnormality", first check if the integrated protocol is enabled for the Hikvision camera.

14. RTSP access to Hikvision camera using configuration camera example path cannot be displayed, how to handle it?

Touch screen using RTSP to access Hikvision camera. The example path for configuring the camera is as follows: "rtsp://admin:1230192.168.1.1:554/h264/ch1/main/av_stream" When unable to display, you can try a new path "rtsp://account: password@camera IP:554/Streaming/Channels/101"

Appendix

1. Self-shopping IoT network card binding domain name collection

Serial Number	Agreement	Wildcard Domain Name
1	UDP	time.windows.com
2	UDP	*. ntp. org. cn
3	TCP UDP HTTP HTTPS	*. tunnel. iotbus. net
4	HTTP HTTPS WS WSS	*.haiwell.com
5	TCP UDP MQTT	*.iotbus.net
6	TCP UDP MQTT	*.cloud.haiwell.com
7	TCP UDP	47. 107. 224. 237
8	TCP UDP ICMP	223. 5. 5. 5

Thank you for choosing Haiwell products, if you have any comments or suggestions on our products or services, please let us know! Web address: en.haiwell.com Copyright © 2005Xiamen Haiwell Technology Co.,Ltd. Version – 202505