

PLC with a built-in HMI

MQTT
Server

Haiwell Cloud



Cloud Box



Card-type PLC



A8 IOT PLC

Multi in 1 = PLC + HMI + RTU + IoT Gateway



1+15



Cloud Engine



8*DI



WiFi Network



Edge Computing

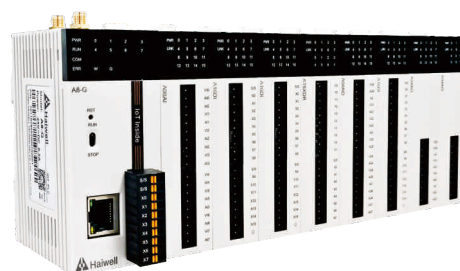
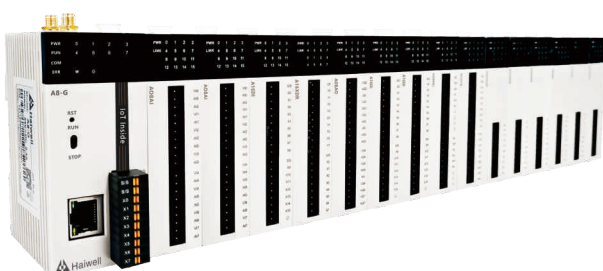


4G Network

Model List

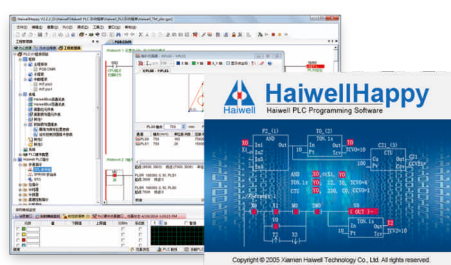
Model	Storage (Flash+RAM)	Max Exp	I/O	LAN	COM	WIFI	Wireless Network	Dimension W×H×D(mm)
A8	4G+512M	15	8 DI	1	1	Yes		40×95×65
A8-G	4G+512M	15	8 DI	1	1	Yes	China 4G	
A8-E	4G+512M	15	8 DI	1	1	Yes	Global 4G	

*A8 series supports Single machine can expand up to 15 modules , A8 does not support expand A01RS.



Features

- Multi in 1=PLC+HMI+RTU+IoT Gateway ,Support Haiwell Cloud and MQTT, Small size, high appearance level, Low cost
- Built-in 8 digital points input, Single machine can expand up to 15 modules, maximum expansion I/O up to 248 points
- Supports all functions of PLC and HMI, Use local mobile or iPad as monitor screen, achieve local operations.
- Strong password protection function, Self-diagnostic function, power failure protection function, calendar (RTC), floating point operations, etc.
- Support access to third-party IoT platforms such as Alibaba Cloud, Amazon, Google, etc.
- Supports for edge calculations. Edge computing through scripting engines built into the terminal,function operations, and interaction with device data
- Using HaiwellHappy PLC programming software and Haiwell Cloud SCADA for programming and management



HaiwellHappy PLC Programming Software



Haiwell Cloud SCADA

Advantage



PLC executable file Generation

PLC program can be generated to executable file which is released and executed independently. So you do not need to send the PLC program to the user, it can be very easy, very safe to put the PLC executable file to the user to download, but do not worry the user would can see the program content.



Support MQTT protocol

Supports MQTT protocol, can be connected to database server/ERP/MES etc. Actively report, support millions of terminal concurrent network, can easily surpass and replace DTU equipment.



realize local operations

Local mobile, iPads and computers can be used as the control interface to realize local operations.



Web API Interface

Third-party software and platforms can easily and securely obtain device data and control devices through the built-in Web API function using HTTP protocol, support real-time data push, support PHP, Java, C#, C++ languages. Support Internet and LAN network.



Strong password protection function

Three levels of password protection function (program files password, each block password, PLC hardware password) and prohibits the application to upload.



Configuration Screen Integration

Innovatively opened the integration function of the device configuration screen to third parties. Device screen can be integrated into a variety of personalized scenarios such as third-party software, websites, APPs, and applets. Let third-party applications immediately have the remote control capabilities of the device.



Radical innovation

Built-in simulator programming software, supports interpolation simulation, communication simulation, easy study, easy use. Greatly reduce the field debugging time, reduce debugging.



Remote data interaction

Supports remote device data interaction through MQTT server, and invocation of the remote device data by Haiwell Cloud SCADA.



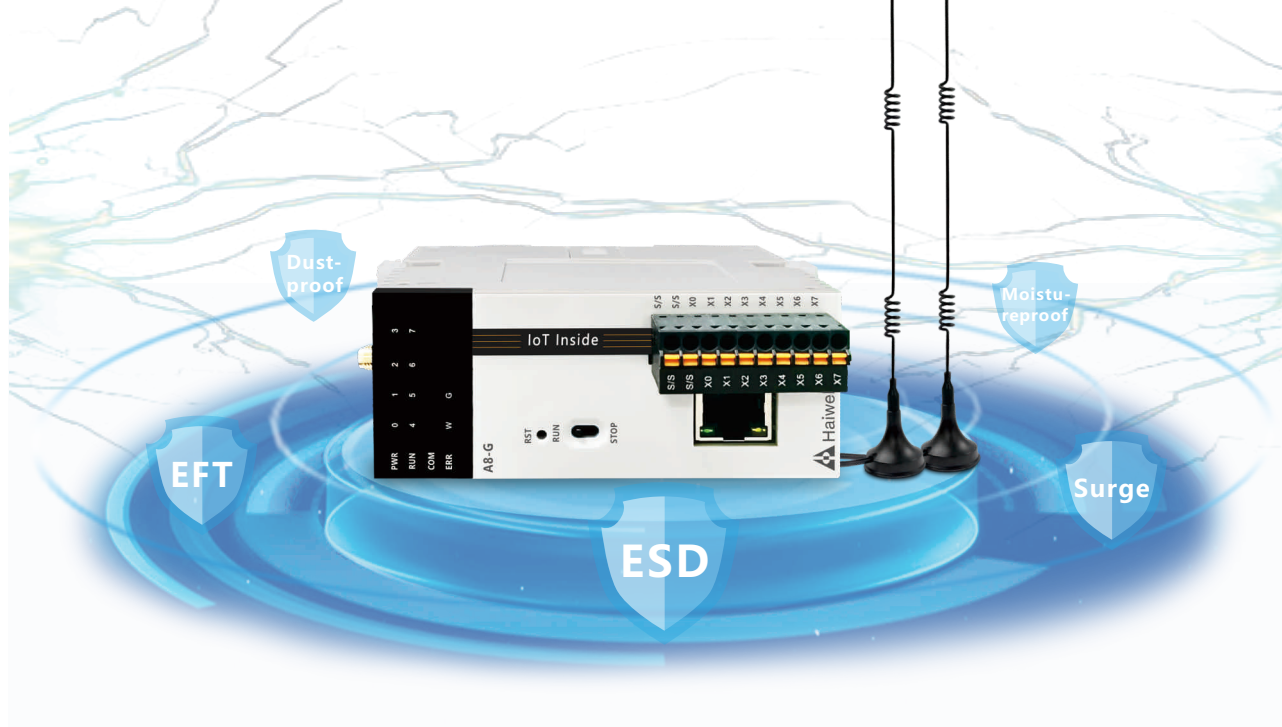
Private Deployment

Support deploy a user-specific Cloud platform on user's own server, without requires of third-party IoT platform providers. Unlimited number of access devices. User can have company's own domain name and logo on the cloud platform, and have an own APP etc.



Powerful analog processing function

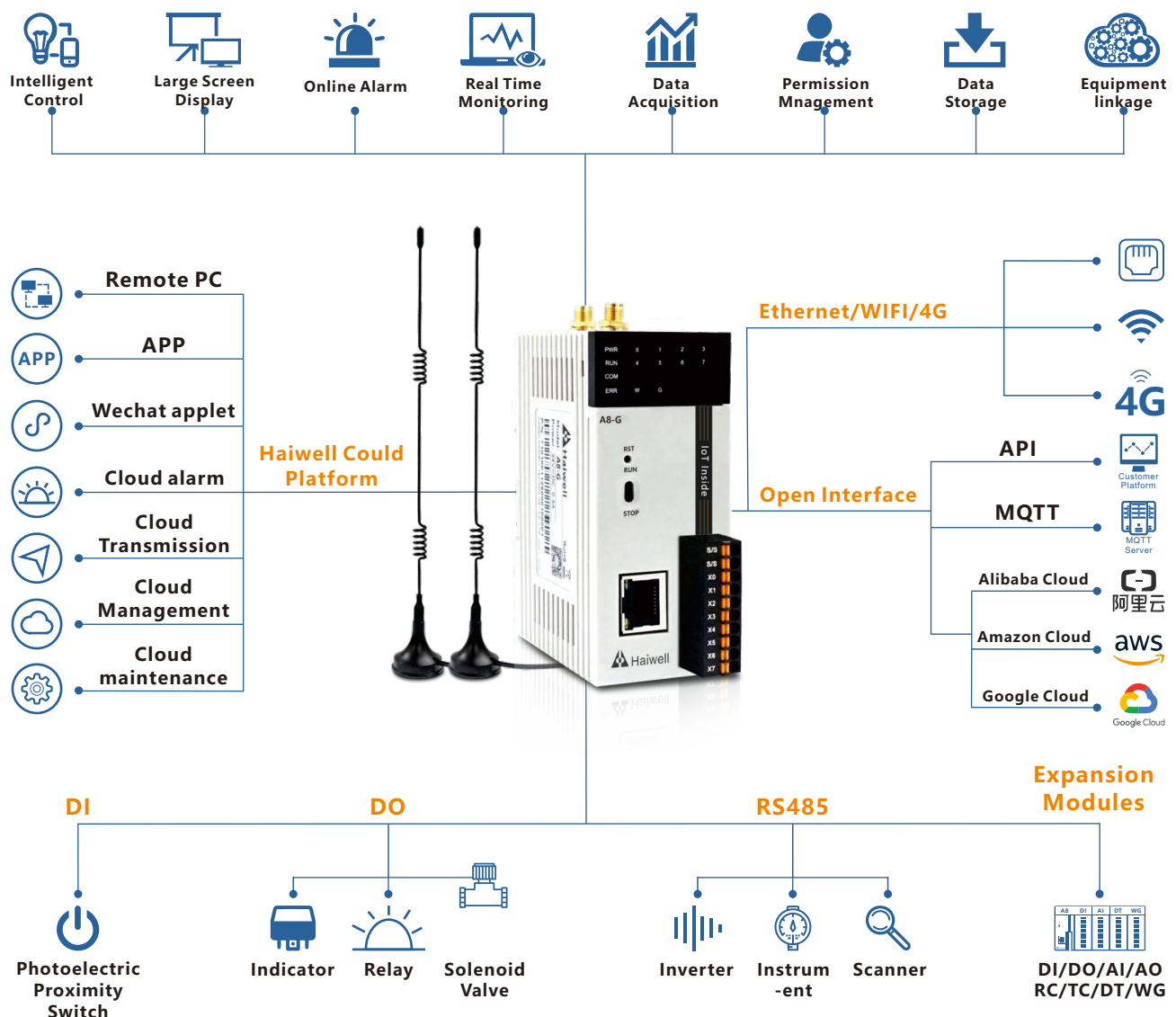
No need of programming, we can read AI/AQ engineering value directly.



PLC + HMI without screen all-in-one machine

A8 series IoT PLC is a small size, compact Internet of things PLC, as a high cost performance product launched by Haiwell. A8 integrated PLC, HMI, IoT gateway, multi-functional RTU, data transmission DTU functions as one, without any external IoT module. PLC, BOX integration design, small volume, increasing space utilization, greatly simplifying the site wiring construction and reducing the cost of operation and maintenance. One device easily realizes the remote operation and maintenance of PLC, data acquisition, edge calculation and analysis, so that the engineer saves time, effort and worry.

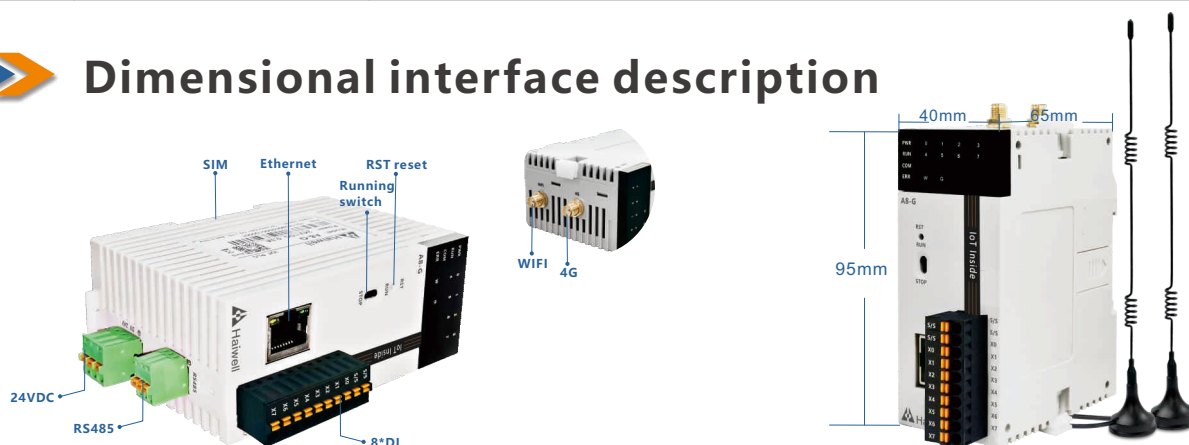
A8 supports all functions of PLC and HMI. At the same time, it can also expand 15 A series PLC modules, through Haiwell Happy PLC programming software and Haiwell Cloud SCADA for programming management. It can connect to the Haiwell Internet of Things(IoT) Cloud platform through WiFi/ 4G/ Ethernet, and connect to Alibaba Cloud, Amazon cloud and other mainstream IoT platforms through MQTT protocol, so that can fully tap the IoT capability of equipment, and help enterprises realize the leap from traditional factory Information to cloud remote information. The more efficient monitoring and management of devices, and the scheduling of the production resource, greatly improve the operational efficiency of industrial applications. It is a big step forward to intelligent manufacturing.

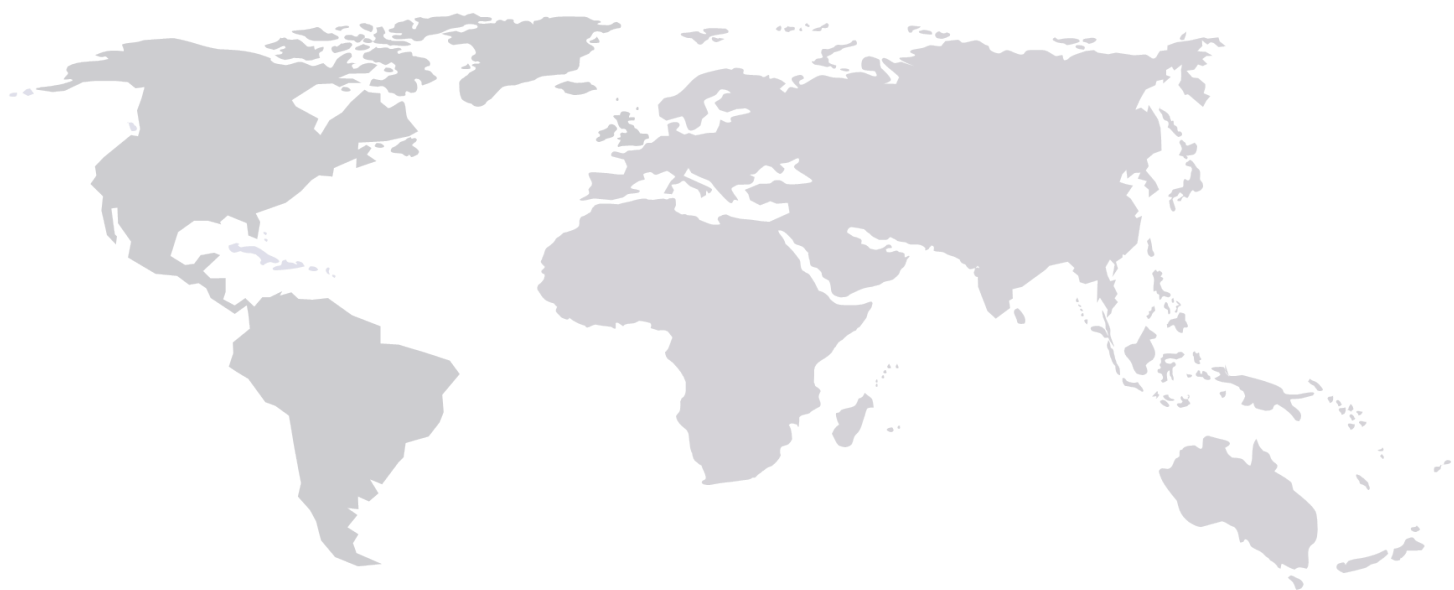


Specification

	Specification	A8	A8-G	A8-E
Software	Programming software	HaiwellHappy PLC programming software, Haiwell Cloud SCADA		
PLC	Program control model	Cycle scan model		
	Input/output (I/O) control model	Refresh once each cycle scan, support immediately refresh instruction (MPU and expansion module)		
	Execution speed of instruction	0.05μs/basic instruction		
	Program language	LD (ladder) + FBD (function block) + IL (instruction list)		
	Program apacity	48K		
	Storage way	Flash ROM permanent storage, dispense with backup battery		
	Maximum expansion	15		
	I/O port	Storage	Flash 4GB, RAM 512MB	
COM port		Support 1 isolated communication (RS485)		
Ethernet Port		Ethernet port: 1 * 10/ 100 Base-Tx		
Hardware system reset		Support		
Switch S0		Single-pole double-throw		
WIFI		Support		
4G		No	China 4G	Global 4G
SIM		No	1 self-elastic Micro SIM card interface	
IO port		8 way optoelectronic isolation digital point input		
Power	Input power	24VDC±20%		
	Power Consumption	< 8W		
	Power Protection	Surge protection		
	Voltage Resistance	500V AC		
Enviroment	Environmental Temperature & humidity	Working temperature: -10 ~ +60 °C , storage temperature: - 20 ~ 70 +°C , Humidity: 10 ~ 90% RH, no condensation		
	Vibration resistance	10~57HZ amplitude 0.075mm, 57HZ 150HZ acceleration 1G, X, Y, Z 10 times in triaxial direction		
	Impact resistance	15G, 11 Ms, X, Y, Z, 6 times in the triaxial direction		
	Insulation impedance	500V DC between AC terminal and GND terminals, 5M Ω or more (all input / output points to ground 500V DC)		
	Protection Level	The complete machine is subjected to a salt spray test of 48 hours		
	Cooling Type	Natural air Cooling		
Structure	Dimension	40mm*95mm*65mm (W*H*D)		
	Shell material	Engineering plastics ABC PC (flame retardant requirements:94V0 grade, in line with ROHS requirements		

Dimensional interface description





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Haiwell APP



Haiwell Wechat

The parameters of product are subject to changes without prior notice. (Ver I - 202208)