Haiwell PLC Products

Haiwell Programmable Logic Controller

Haiwell

PLC Model Description

PLC MPU

- C Series - Economic PLC MPU
- T Series - Standard PLC MPU
- H Series - High Performance PLC MPU
- N Series - Motion Control PLC MPU

PLC Expansion Modules

- Digital I/O Extension Modules
- Analog I/O Extension Modules
- Communication Extension Modules

Accessories

PLC Model Description

H 32 S 2 R

1 2 3 4 5

1 Series

C：Economic PLC MPU

T：Standard PLC MPU

H：High Performance PLC MPU

N：Motion Control PLC MPU

2 I/0 Point

10-point、16-point、20-point、24-point、32-point、40-point、48-point and 60-point are optional

3 Specification

S: Standard Digital PLC MPU

4 Power Specification

2：220V AC

0：24V DC

5 Output type

R：Relay

T：Transistor

C Series - Economic PLC MPU

Model		Specification				Dimension
24V DC	220V AC	DI	DO	Communication	Max Module	
C10S0R	C10S2R	6	4R	RS232 + RS485	N/A	93×95×82mm
C10S0T	C10S2T	6	4T	RS232 + RS485	N/A	
C16S0R	C16S2R	8	8R	RS232 + RS485	N/A	
C16S0T	C16S2T	8	8T	RS232 + RS485	N/A	
C24S0R	C24S2R	16	8R	RS232 + RS485	N/A	131×95×82mm
C24S0T	C24S2T	16	8T	RS232 + RS485	N/A	
C32S0R	C32S2R	16	16R	RS232 + RS485	N/A	
C32S0T	C32S2T	16	16T	RS232 + RS485	N/A	
C48S0R	C48S2R	28	20R	RS232 + RS485	N/A	177×95×82mm
C48S0T	C48S2T	28	20T	RS232 + RS485	N/A	
C60S0R	C60S2R	36	24R	RS232 + RS485	N/A	
C60S0T	C60S2T	36	24T	RS232 + RS485	N/A	

◆ MPU Points：10/16/24/32/48/60;

◆ Program capacity：48K steps;

◆ No extension module function;

◆ Cost-effective, high-reliability and practical;

◆ AC220V or DC24V power supply;

◆ Use removable terminal blocks, with the rechargeable battery for saving real-time clock;

◆ The platform update, using ARM architecture, the processing speed increases more than 10 times;

◆ COM port: Bulit-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, Free communication Protocol and haiwellbus high speed Protocol.

T Series - Standard PLC MPU

| Model | | Specification | | | | | | Dimension |
24V DC	220 VAC	DI	DO	Pulse Input	Pulse Output	Communication	Max Module	
T16S0R	T16S2R	8	8R	2 Channel 200K		RS232 + RS485, Max 5 ports	7	93×95×82mm
T16S0T	T16S2T	8	8T	2 Channel 200K	2 Channel 200K	RS232 + RS485, Max 5 ports	7	
T24S0R	T24S2R	16	8R	2 Channel 200K		RS232 + RS485, Max 5 ports	7	131×95×82mm
T24S0T	T24S2T	16	8T	2 Channel 200K	2 Channel 200K	RS232 + RS485, Max 5 ports	7	
T32S0R	T32S2R	16	16R	2 Channel 200K		RS232 + RS485, Max 5 ports	7	
T32S0T	T32S2T	16	16T	2 Channel 200K	2 Channel 200K	RS232 + RS485, Max 5 ports	7	
T48S0R	T48S2R	28	20R	2 Channel 200K		RS232 + RS485, Max 5 ports	7	177×95×82mm
T48S0T	T48S2T	28	20T	2 Channel 200K	2 Channel 200K	RS232 + RS485, Max 5 ports	7	
T60S0R	T60S2R	36	24R	2 Channel 200K		RS232 + RS485, Max 5 ports	7	
T60S0T	T60S2T	36	24T	2 Channel 200K	2 Channel 200K	RS232 + RS485, Max 5 ports	7	

◆ MPU Points：10/16/24/32/48/60;

◆ Program capacity：48K steps;

◆ Expandable to Max. 7 Modules;

◆ AC220V or DC24V power supply;

◆ Use removable terminal blocks, with the rechargeable battery for saving real-time clock;

◆ The platform update, using ARM+FPGA architecture, the processing speed increases more than 10 times;

◆ 2 groups of AB phase 200KHZ pulse output; 2 channels of 200KHZ pulse input;

◆ COM port: Bulit-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, Free communication Protocol and haiwellbus high speed Protocol.

H Series – High Performance PLC MPU

Model		Specification						Dimension
24V DC	**220V AC**	**DI**	**DO**	**Pulse Input**	**Pulse Output**	**Communication**	**Max Module**	
H16S0R	H16S2R	8	8R	4 Channel 200K		RS232 + RS485, Max 5 ports	7	93×95×82mm
H16S0T	H16S2T	8	8T	4 Channel 200K	4 Channel 200K	RS232 + RS485, Max 5 ports	7	
H24S0R	H24S2R	12	12R	4 Channel 200K		RS232 + RS485, Max 5 ports	7	
H24S0T	H24S2T	12	12T	4 Channel 200K	4 Channel 200K	RS232 + RS485, Max 5 ports	7	
H32S0R	H32S2R	16	16R	4 Channel 200K		RS232 + RS485, Max 5 ports	7	131×95×82mm
H32S0T	H32S2T	16	16T	4 Channel 200K	4 Channel 200K	RS232 + RS485, Max 5 ports	7	
H40S0R	H40S2R	20	20R	4 Channel 200K		RS232 + RS485, Max 5 ports	7	
H40S0T	H40S2T	20	20T	4 Channel 200K	4 Channel 200K	RS232 + RS485, Max 5 ports	7	
H60S0R	H60S2R	36	24R	4 Channel 200K		RS232 + RS485, Max 5 ports	7	177×95×82mm
H60S0T	H60S2T	36	24T	4 Channel 200K	4 Channel 200K	RS232 + RS485, Max 5 ports	7	

◆ MPU Points：16/24/32/40/60;

◆ Program capacity：48K steps;

◆ Expandable to Max. 7 Modules;

◆ AC220V or DC24V power supply;

◆ Use removable terminal blocks and use the rechargeable battery for saving real-time clock;

◆ The platform update, using ARM+FPGA architecture, the processing speed increases more than 10 times;

◆ 4 groups of AB phase 200KHZ pulse output; 4 channels of 200KHZ pulse input;

◆ COM port: Bulit-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, up tp 5 communication ports and up to 7 non-communication modules.

N Series - Motion Control PLC MPU

Supports 2-axis linear /arc interpolation, 2-axis synchronous control, absolute address, relative address, backlash compensation, electric original point redefine etc.

Model		Specification						Dimension
24V DC	220V AC	DI	DO	Pulse Input	Pulse Output	Communication	Max Module	
N16S0T	N16S2T	8	8T	4 Channel 200K	4 Channel 200K	RS232 + RS485, Max 5 ports	7	
N24S0T	N24S2T	12	12T	6 Channel 200K	6 Channel 200K	RS232 + RS485, Max 5 ports	7	93×95×82mm
N40S0T	N40S2T	20	20T	8 Channel 200K	8 Channel 200K	RS232 + RS485, Max 5 ports	7	131×95×82mm
N60S0T	N60S2T	36	24T	8 Channel 200K	8 Channel 200K	RS232 + RS485, Max 5 ports	7	177×95×82mm

◆ MPU Points：16/24/40/60;

◆ Program capacity：48K steps;

◆ Expandable to Max. 7 Modules;

◆ AC220V or DC24V power supply;

◆ Use removable terminal blocks & the rechargeable battery for saving real-time clock;

◆ **Support linear/arc interpolation, Synchronism pulse output;**

◆ The platform update, using ARM+FPGA architecture, the processing speed increases more than 10 times;

◆ **Support absolute address、relative address；Support backlash compensation、electric original point redefine etc;**

◆ 8 groups of AB phase 200KHZ pulse output; 8 channels of 200KHZ pulse input ;

◆ COM port: Bulit-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, up tp 5 communication ports and up to 7 non-communication modules .

Digital I/O Extension Modules

Built-in communication function: support parallel bus and serial bus, Extended via serial bus(as remote function), without restriction of extension points of the system, can be installed distributedly.

Model		Specification			Dimension
24V DC	220V AC	DI	DO	Communication	
H08DI		8			30×95×82mm
H08DOR			8R		
H08DOT			8T		
H08XDR		4	4R		
H08XDT		4	4T		
H16DI		16		RS485,support remote function	70×95×82mm
H16DOR			16R	RS485,support remote function	
H16DOT			16T	RS485,support remote function	
H16XDR		8	8R	RS485,support remote function	
H16XDT		8	8T	RS485,support remote function	
H24DI	H24DI2	24		RS485,support remote function	93×95×82mm
H24XDR	H24XDR2	12	12R	RS485,support remote function	
H24XDT	H24XDT2	12	12T	RS485,support remote function	
H40DI	H40DI2	40		RS485,support remote function	131×95×82mm
H36DOR	H36DOR2		36R	RS485,support remote function	
H36DOT	H36DOT2		36T	RS485,support remote function	
H40XDR	H40XDR2	20	20R	RS485,support remote function	
H40XDT	H40XDT2	20	20T	RS485,support remote function	
H64XDR	H64XDR2	32	32R	RS485,support remote function	177×95×82mm
H64XDT	H64XDT2	32	32T	RS485,support remote function	

◆ MPU Points：8/16/24/36/40/64;

◆ It can be used as extension module for any haiwell plc;

◆ 8-point, 16-point digital modules only support DC24V, digital modules with more than 16-point support both DC24V and 220VAC power supply;

◆ Digital modules with more than 8-point have RS485 port, support stand-alone use and can also be used for Remote IO.

Analog I/O Extension Modules

Built-in communication function: support parallel bus and serial bus, Extended via serial bus(as remote function), without restriction of extension points of the system, can be installed distributedly.

Model		Specification				Dimension
24V DC	220V AC	AI	AO	Conversion Accuracy	Communication	
H04DT		4 Channel DS18B20 temperature		9~12 bits		30×95×82mm
H32DT		32 Channel DS18B20 temperature		9~12 bits	RS485, support remote function	
S04AI	S04AI2	4		12 bits	RS485, support remote function	70×95×82mm
S04AO	S04AO2		4	12 bits	RS485, support remote function	
S04XA	S04XA2	2	2	12 bits	RS485, support remote function	
H04RC	H04RC2	4 thermal resistance		16 bits	RS485, support remote function	
H04TC	H04TC2	4 thermocouple		16 bits	RS485, support remote function	
H08TC	H08TC2	8 thermocouple		16 bits	RS485, support remote function	
S08AI	S08AI2	8		12 bits	RS485, support remote function	93×95×82mm
S08AO	S08AO2		8	12 bits	RS485, support remote function	
S08XA	S08XA2	4	4	12 bits	RS485, support remote function	
H08RC	H08RC2	8 thermal resistance		16 bits	RS485, support remote function	

◆ This series consists of 22 models , including analog , thermal resistance, thermocouple and DS18B20 temperature sensor module, with 4-point,8-point and 32-point;

◆ It can be used as extension module for any Haiwell plc host;

◆ Modules with RS485 port can be use as remote I/O;

◆ Power supply: internal DC24V or external 220VAC optional;

◆ AI, AO supports 6 kinds of signal types: [4,20]mA, [1,5]V, [0,20]mA, [0,5]V, [0,10]V, [-10,10]V;

◆ Thermal Resistance kinds: PT100,PT1000, Cu50,Cu100;

◆ Thermocouple kinds: S, K, T, E, J, B, N, R, Wre3/25, Wre5/26, [0,20]mV, [0,50]mV, [0,100]mV.
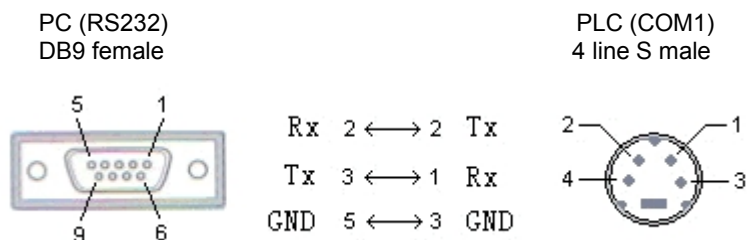
Communication Extension Modules

Model	Specification	Dimension
S01RS	With isolation ,1 RS232/RS485 communication port, Modbus RTU/ASCII protocol, freedom communication protocol, Haiwellbus high speed communication protocol, Baud rate 1200~57600bps	30×95×82mm
S01GL	With isolation ,Modbus RTU/ASCII protocol, freedom communication protocol, Haiwellbus high speed communication protocol, Baud rate 1200~115200bps	
H01ZB	Zigbee wireless communication	
PC2ZB	PC to Zigbee module	48x70x24mm

◆ This series consists of 4 models , communication port extension module and the wireless communication module ;

◆ Power supply: internal DC24V;

◆ Baud rate 1200～115200bps, master/slave mode can be used well;

◆ Support Modbus RTU/ASCII protocol, free communicaion protocol, HaiwellBus high-speed communication protocol;

◆ It can be used as extension module for any host, except C series PLC, increasing the number of communication ports;

◆ Single communication port module can be extended to two or three communication ports, RS485/RS232 port optionally.

Accessories

Model	Specification	Dimension
ACA20	RS232 programming cable (DB9, length 2 meters)	2.0m

Programming Cable Wiring Diagram

PC (RS232)
DB9 female

PLC (COM1)
4 line S male

Rx 2 ⟷ 2 Tx
Tx 3 ⟷ 1 Rx
GND 5 ⟷ 3 GND

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