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SINOVO

SINOVO - PLC

PRODUCTS CATALOGUE



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SINOVO PLC is a versatile high-performance programmable logic controller, which is widely used in plastics, packaging, textiles, food, medical, pharmaceutical, environmental, municipal, printing, building materials, elevators, central air conditioning, numerical control machine tools and other fields of systems and control equipment. In addition to its own various peripheral interfaces (digital input, digital output, analog input, analog output, high-speed counter, high-speed pulse output channels, power supply, communication ports, etc.), it is also expandable with all types of expansion modules for flexible configuration.

SINOVO company owns the 100% independent intellectual property rights over both its hardware and software products, all products can be customized according to customer's requirements to meet the different needs of various industries.

7 Characteristics

- ◆ **Quality Guarantee:** In accordance with IEC-61131 international standard develop
- ◆ **Independent Property Rights:** 100% independent intellectual property rights, OEM/ODM are supported
- ◆ **Built-In Simulator:** First one built-in 100% simulator programming software, easy to study and easy to use
- ◆ **Motion Control:** Support linear interpolation, ARC interpolation, original point return, backlash compensation, electric original point redefine
- ◆ **High Openness:** Support 5 communication ports simultaneous working, may constitute N:N network
- ◆ **Communication Function:** Support Modbus RTU/ASCII, SINOVObus high speed protocol, freedom protocol
- ◆ **Distributed IO:** Module with built-in communication port can be installed distributedly as a remote IO unit

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/O Point

Built-in IO: 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
- M:** Digital and Analog Integrated MPU

4 Power Specification

- 2** 220V AC
- 0** 24V DC

5 Output type




- R** Relay
- T** Transistor

MODEL TABLE

SINOVO PLC main MPU have 4 series (C economic, T standard, H high-performance, N motion control)




R Relay T Transistor C: Channel

C Series - Economic PLC MPU

Model		Specification				Dimension
24V DC	220V AC	DI	DO	COM port	Max. Expansion	
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 expansion 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: Built-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, Free Communication Protocol and SINOVObus high speed Protocol.

T SERIES - STANDARD PLC MPU

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

- ◆ MPU Points: 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: Built-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, Free Communication Protocol and SINOVObus high speed Protocol .


T SERIES - STANDARD PLC MPU

Model		Specification						Dimension
24V DC	220 VAC	DI	DO	Pulse Input	Pulse Input	COM port	Max exp.	
H16S0R	H16S2R	8	8R*	4C 200KHz		RS232 + RS485, Max 5 ports	7	 93×95×82mm
H16S0T	H16S2T	8	8T*	4C 200KHz	4C 200KHz	RS232 + RS485, Max 5 ports	7	
H24S0R	H24S2R	12	12R	4C 200KHz		RS232 + RS485, Max 5 ports	7	
H24S0T	H24S2T	12	12T	4C 200KHz	4C 200KHz	RS232 + RS485, Max 5 ports	7	
H32S0R	H32S2R	16	16R	4C 200KHz		RS232 + RS485, Max 5 ports	7	 131×95×82mm
H32S0T	H32S2T	16	16T	4C 200KHz	4C 200KHz	RS232 + RS485, Max 5 ports	7	
H40S0R	H40S2R	20	20R	4C 200KHz		RS232 + RS485, Max 5 ports	7	
H40S0T	H40S2T	20	20T	4C 200KHz	4C 200KHz	RS232 + RS485, Max 5 ports	7	
H60S0R	H60S2R	36	24R	4C 200KHz		RS232 + RS485, Max 5 ports	7	 177×95×82mm
H60S0T	H60S2T	36	24T	4C 200KHz	4C 200KHz	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: Built-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, up to 3 communication ports and up to 5 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	220 VAC	DI	DO	Pulse Input	Pulse Output	COM port	Max exp.	
N16S0T	N16S2T	8	8T*	4C 200KHz	4C 200KHz	RS232 + RS485, Max 5 ports	7	 93×95×82mm
N24S0T	N24S2T	12	12T	6C 200KHz	6C 200KHz	RS232 + RS485, Max 5 ports	7	
N40S0T	N40S2T	20	20T	8C 200KHz	8C 200KHz	RS232 + RS485, Max 5 ports	7	 131×95×82mm
N60S0T	N60S2T	36	24T	8C 200KHz	8C 200KHz	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: Built-in RS232 and RS485 ports, compatible with Modbus ASCII/RTU Protocol, up to 3 communication ports and up to 5 non-communication modules .

SINOVO PLC EXPANSION MODULES




Built-in RS485 Communication port, support remote I/O function.

Digital I/O expansion Modules

Specification				Dimension
24V DC	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	24		RS485, support remote function	 93×95×82mm
H24XDR	12	12R	RS485, support remote function	
H24XDT	12	12T	RS485, support remote function	
H40DI	40		RS485, support remote function	 131×95×82mm
H36DOR		36R	RS485, support remote function	
H36DOT		36T	RS485, support remote function	
H40XDR	20	20R	RS485, support remote function	
H40XDT	20	20T	RS485, support remote function	 177×95×82mm
H64XDR	32	32R	RS485, support remote function	
H64XDT	32	32T	RS485, support remote function	



- ◆ MPU Points 8/16/24/36/40/64;
- ◆ It can be used as expansion module for any SINOVO 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 EXPANSION MODULES

Specification					Dimension
24V DC	AI	AO	Conversion Accuracy	Communication	
H04DT	4 Channel DS18B20 temperature or SHT11 humidity		9~12 bits		 30×95×82mm
H32DT	32 Channel DS18B20 temperature		9~12 bits	RS485, support remote function	
S04AI	4		12 bits	RS485, support remote function	 70×95×82mm
S04AO		4	12 bits	RS485, support remote function	
S04XA	2	2	12 bits	RS485, support remote function	
H04RC	4 thermal resistance		16 bits	RS485, support remote function	
H04TC	4 thermocouple		16 bits	RS485, support remote function	
H08TC	8 thermocouple		16 bits	RS485, support remote function	
S08AI	8		12 bits	RS485, support remote function	 93×95×82mm
S08AO		8	12 bits	RS485, support remote function	
S08XA	4	4	12 bits	RS485, support remote function	
H08RC	8 thermal resistance		16 bits	RS485, support remote function	


- ◆ This series consists of 12 models , including analog , thermal resistance, thermocouple and DS18B20 temperature sensor module, with 4-point,8-point and 32-point;
- ◆ It can be used as expansion module for any SINOVO PLC host;
- ◆ Power supply All of these are DC24V power supply;
- ◆ 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.
- ◆ Hardware converter accurate: Analog module 12 bits A/D hardware converter, code range:0~32000, temperature module 16 bits A/D hardware converter.

COMMUNICATION EXPANSION MODULES

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

- ◆ This series consists of 3 models , communication port expansion module and the wireless communication module ;
- ◆ Power supply: internal DC24V;
- ◆ Baud rate 1200 115200bps, master/slave mode can be used well;
- ◆ Single communication port module can be extended to two or three communication ports, RS485/RS232 port optionally.
- ◆ Support Modbus RTU/ASCII protocol, free communication protocol, SINOVOBus high-speed communication protocol;
- ◆ It can be used as expansion module for any host, except C series PLC, increasing the number of communication ports;

Accessories

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