



Medium PLC Product Catalog

H7-1200
H7-300

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About us

Shenzhen Huceen Automation Technology Co., Ltd. is specialized in industrial automation products R & D, production, sales and technical services. We rely on professional R & D team and years of industry technology accumulation, to supply high-quality, high-performance, highly competitive automation products and total solutions for customers.

Our company has HUCEEN brand H7 series PLC, Hpanel series HMI, HBox Internet of Things module and HCloud industrial cloud platform and other products. It provides system solutions for auto industry, electric power, chemical industry, metallurgy, environmental protection, water treatment, new energy, rail transportation and other industries, and it is widely used in electronic equipment, plastic machinery, packaging machinery, ceramic machinery, textile machinery, HVAC equipment, medical equipment, CNC equipment and many other industries.

We adhere to the business philosophy of integrity and truth-seeking. We build on the industrial automation with our own intellectual property rights, and promote the competitiveness and profitability of our customers. We work with our customers to create a win-win situation, realize enterprise value and customer value grow together.

400K

Quantity of shipment



National High-tech Enterprise

30+

Cooperated Listed Company



30+ Technology patents

80+

Sales and service network



4 core technologies

Mission

To help customers become industry leaders

Vision

To become a respected and global supplier of industrial automation products and solutions

Value

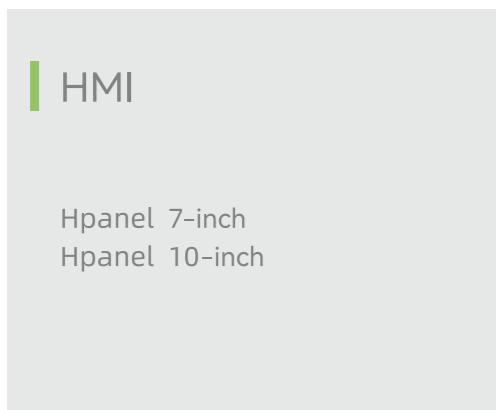
Integrity, specialty, innovation, sharing

Operation philosophy

Improve customers competitiveness continuously, we not only provide excellent products and services, but also supply customers with more industry knowledge and more professional technical solutions.



Huceen product system



CATALOG

1、Summarize

About Huceen	01
Company Vision	02
Product system	03

4、Appendix

Appendix1: H7-1200 Expansion module wiring layout	22
Appendix2: H7-300 Wiring diagram	24
Appendix3: Ordering data	25

2、H7-1200PLC

H7-1200 Function characteristics	05
Digital input modules	06
Digital output modules	07
Digital input/output modules	08
Analog input modules	09
Analog output modules	10
Analog input/output modules	11
Temperature module	12

5、Service and Warranty

27

3、H7-300PLC

H-300 Summarize	13
Digital input modules	15
Digital output modules	16
Digital input/output modules	17
Analog output modules	18
Analog input modules	19
IM153 Communication interface module	21

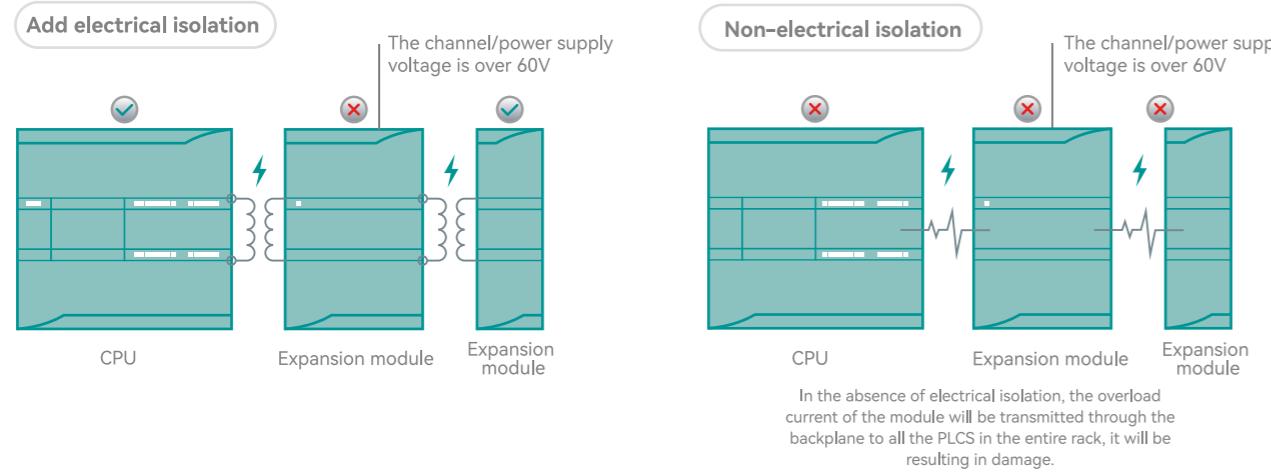
H7 -1200



Function Features

Add the function of electrical isolation

The channel detection circuit of the H7-1200AI/AO module and the backplane circuit of the module are added electrical isolation. If the module channel or power supply is connected to a high voltage, there is one thing would be realizable that only the module detection circuit can be damaged without affecting the backplane circuit.



Perfect compatibility with TIA Portal programming software

- H7-1200 PLC uses "TIA Portal" software programming, does not change the programming habits of engineers, there is no need to repeat learning.

The port of analog module has strong tolerance

- Both I/O and power supply can withstand 60V high voltage.

The freezing function of I/O module diagnosis and output

- The input channel supports noise suppression and filtering.
- The input channel supports overflow, downflow, and disconnection diagnosis function.
- The output channel supports the output freezing function when the CPU stops.

Digital input modules

Model No.	SM 1221 DI 8x24 V DC	SM 1221 DI 16x24 V DC
Order No.	H7 221-1BF32-0XB0	H7 221-1BH32-0XB0
Picture		
Product Description	digital input module DI8 x 24V DC , sinking/sourcing type	digital input module DI16 x 24V DC , sinking/sourcing type
Standard		
Dimensions W x H x D	45x100x75mm	
Power Consumption	1.5W	2.5W
Current Consumption (SM bus)	105mA	130mA
Current Consumption (24V DC)	4mA for each input point used	
Digital input		
Number of Inputs	8	16
Input Type	The sinking type /sourcing type	
Rated Voltage	24V DC at 4mA, Rated Value	
Allowable Continuous Voltage	max. 30VDC	
Surge Voltage(Max)	35V DC, lasting 0.5s	
Logic 1 Signal (Min)	15V DC at 2.5mA	
Logic 0 Signal (Max)	5V DC at 1mA	
Optical Isolation (field side and logic side)	500V AC, lasting 1 min	
Isolation Group	2	4
Filter time	0.2, 0.4, 0.8, 1.6, 3.2, 6.4 and 12.8 ms (optional, 4 inputs form one group)	

Digital output modules

Model No.	SM 1222 DQ 8x24 V DC	SM 1222 DQ 16x24 V DC	SM 1222 DQ 8xRLY	SM 1222 DQ 16xRLY		
Order No.	H7 222-1BF32-0XB0	H7 222-1BH32-0XB0	H7 222-1HF32-0XB0	H7 222-1HH32-0XB0		
picture						
Product Description	digital output module DQ8 x 24VDC, Transistor	digital output module DQ16 x 24VDC, Transistor	digital output module DQ8 x Relay	digital output module DQ16 x Relay		
Standard	45x100x75					
Dimension (W×H×D)	45x100x75	70x100x75	45x100x75	70x100x75		
Power Consumption	1.5W	2.5W	4.5W	8.5W		
Current Consumption (SM bus)	120mA	140mA	120mA	135mA		
Current Consumption (24V DC)	50mA	100mA	Each relay coil used is 11mA			
Digital Output						
Number of Outputs	8	16	8	16		
Output Type	Solid-MOSFET (source type)	Relay, dry contact				
Voltage Range	20.4-28.8V DC	5-30V DC or 5-250V AC				
Logic 1 Signal at Maximum Current	min 20V DC	-				
Logic 0 Signal with 10KΩ Load	max 0.1V DC	-				
Electric Current (Max)	0.5A	2A				
Lamp Load	5W	30W DC/200W AC				
Flood Leakage Current of Each Point	Maximum 10µA	-				
Surge Current	8A, max. lasting 100ms	it is 7A when the contact is closed				
Isolation(field side and logic side)	500V AC, lasting 1 min	1500V AC, lasting 1 min(Coil and contact) ; None(coil and logic side)				
Isolation Group	1	2	4			
Current of Each Public Terminal (Max)	4A	8A	10A			
Switching Delay	from the disconnection to connection(Max): 50µs; from the connection to disconnection(Max): 200µs	Up to 10ms				
Mechanical Lifetime (non-responsible)	-	10,000,000 break/close cycles				
Lifetime under Rated Load	-	100,000 break/close cycles				
Behavior at RUN-STOP	previous value or replacement value (default is 0)					

Digital input/output modules

Model No.	SM 1223 DI 8x24 V DC DQ 8x24 V DC	SM 1223 DI 16x24 V DC DQ 16x24 V DC	SM 1223 DI 8x24 V DC DQ 8xRLY	SM 1223 DI 16x24 V DC DQ 16xRLY
Order No.	H7 223-1BH32-0XB0	H7 223-1BL32-0XB0	H7 223-1PH32-0XB0	H7 223-1PL32-0XB0
Picture				
Product Description	digital input & output module DI8 x 24V DC sinking /sourcing type & DQ8 x 24V DC, Transistor output	digital input & output module DI16 x 24V DC sinking/sourcing type & DQ16 x 24V DC, Transistor output	digital input & output module DI8 x 24V DC sinking/sourcing type & DQ8 x relay, relay output	digital input & output module DI16 x 24V DC sinking/sourcing type & DQ16 x relay, relay output
Standard				
Dimension (W×H×D)	45x100x75	70x100x75	45x100x75	70x100x75
Power Consumption	2.5W	4.5W	5.5W	10W
Current Consumption (SM bus)	145mA	185mA	145mA	180mA
Current Consumption (24V DC)	4mA for each input point used			4mA for each input point used, each relay coil used is 11mA
Digital Input				
Number of Inputs	8	16	8	16
Input Type	The sinking /sourcing type			
Surge Voltage	35V DC, lasting 0.5s			
Logic 1 Signal (Min)	15V DC at 2.5mA			
Logic 0 Signal (Max)	5V DC at 1mA			
Optical Isolation (field side and logic side)	500 V AC, lasting 1 min			
Isolation Group	2			
Filter Time	0.2, 0.4, 0.8, 1.6, 3.2, 6.4 and 12.8 ms (optional, 4 inputs form one group)			
Digital Output				
Number of Outputs	8	16	8	16
Output Type	Solid-MOSFET (source type)	Relay, dry contact		
Voltage Range	20.4-28.8V DC	5-30V DC or 5-250V AC		
Logic 1 Signal at Maximum Current	min 20V DC	-		
Logic 0 Signal with 10KΩ Load	max 0.1V DC	-		
Electric Current (Max)	0.5A	2A		
Lamp Load	5W	30W DC/200W AC		
Flood Leakage Current of Each Point	max 10µA	-		
Surge Current	8A, max. lasting 100ms	it is 7A when the contact is closed		
Isolation (field side and logic side)	500V AC, lasting 1 min	1500V AC, lasting 1 min(Coil and contact) ; None(coil and logic side)		
Isolation Group	1	2	4	
Current of Each Public Terminal (Max)	4A	8A	10A	8A
Switching Delay	from the disconnection to connection(Max): 50µs; from the connection to disconnection(Max): 200µs	Up to 10ms		
Mechanical Lifetime (non-responsible)	-	10,000,000 break/close cycles		
Lifetime under Rated Load	-	100,000 break/close cycles		
Behavior at RUN-STOP	previous value or replacement value (default is 0)			

Analog input modules

Model No.	SM1231 AI4 x 13 Bits	SM1231 AI8 x 13 Bits	SM1231 AI4 x 16 Bits
Order No.	H7 231-4HD32-0XB0	H7 231-4HF32-0XB0	H7 231-5ND32-0XB0
Picture			
Product Description	Analog input module AI4 x 13 bits	Analog input module AI8 x 13 bits	Analog input module AI4 x 16 bits
Standard			
Dimension (WxHxD)		45x100x75mm	
Power Consumption	2.2W	2.3W	2.0W
Current Consumption (SM bus)	80mA	90mA	80mA
Current Consumption (24V DC)		45mA	65mA
Analog Input			
Number of Inputs	4	8	4
Input Type	voltage or current (differential): 2 can be selected as a group range	Voltage or current (differential)	
Input Range	±10V, ±5V, ±2.5V or 0—20mA	±10V, ±5V, ±2.5V, ±1.25V, 0—20mA or 4—20 mA	
Full scale Range (Data Word)		-27648—27648	
Overshoot/undershoot Range (Data Word)	Voltage: 32,511—27,649/-27,649 — -32,512 Current: 32,511—27,649/0 — -4,864	Voltage: 32,511—27,649/-27,649 — -32,512 Current 0—20mA: 32,511—27,649/0 — -4,864; 4—20mA: 32,511—27,649/-1 — -4,864	
Overflow/Underflow (Data Word)	Voltage: 32,767—32,512/-32,513 — -32,768 Current: 32,767—32,512/-4865 — -32,768	Voltage: 32,767—32,512/-32,513 — -32,768 Current 0—20mA: 32,767—32,512/-4,865 — -32,768; 4—20mA: 32,767—32,512/-4,865 — -32,768	
Data format	12 bits + signal bits	15 bits + signal bits	
Max. Voltage/Current Resistance		±60V/±40mA	
Smoothness	None, weak, medium or strong		
Noise Supression	400、60、50 or 10Hz		
Isolation(field side and logic side)	None		
Precision(25°C/0-55°C)	full range ±0.1%/±0.2%	full range ±0.1%/±0.3%	
Working Signal Range	signal plus common mode voltage must be <+12V and >-12V		
Diagnosis: Overflow/underflow		Support	
Circuit Break(Current Mode Only)	not applicable	4—20mA range only (If input is below -4,164; 1.0mA)	

Analog output modules

Model No.	SM1232 AQ2 x 14 Bits	SM1232 AQ4 x 14 Bits
Order No.	H7 232-4HB32-0XB0	H7 232-4HD32-0XB0
Picture		
Product Description	analog output module AQ2 x 14 bits	analog output module AQ4 x 14 bits
Standard		
Dimension (WxHxD)	45x100x75mm	
Power Consumption	1.5W	
Current Consumption (SM bus)	80mA	
Current Consumption (24V DC)	45mA (no load)	
Analog Output		
Number of Outputs	2	4
Output Type	Voltage or current	
Output Range		
Current Output	0—20mA or 4—20mA	
Voltage Output	±10 V	
Data Word Format		
Voltage	-27648—27648	
Current	0-27648	
Resolution	14 bits	
Voltage Mode		
Current Mode	13 bits	
Max. Voltage Resistance	±60 V	
Isolation (field side and logic side)	500VAC	
Precision (25°C/0-55°C)	full range ±0.3% /±0.6%	
Stability Time	Voltage: 300μS(R), 750μS(1 uF); Current: 600μS(1 mH), 2 ms(10 mH)	
Load Impedance	Voltage: ≥ 1000 Ω; Current: ≤ 600 Ω	
Output Status in STOP Mode	previous value or replacement value (default is 0)	
Diagnosis		
Overflow/underflow	Support	
Voltage Mode: short circuit to ground	Support	
Current Mode: Circuit break mode	Support	

Analog input/output modules

Model No.	SM1234 AI4 x 13 Bits & AQ2 x 14 Bits		
Order No.	H7 234-4HE32-0XB0		
Picture			
Product Description	Analog input & output module AI4 + AQ2, Input: 13 bits		
Standard			
Dimension (W×H×D)	45x100x75mm		
Power Consumption	2W		
Current Consumption (SM bus)	80mA		
Current Consumption (24V DC)	60mA(no load)		
Analog Input			
Number of Inputs	4		
Input Type	voltage or current (differential): 2 can be selected as a group range		
Input Range	±10V, ±5V, ±2.5V, 0—20mA or 4—20mA		
Full scale Range (Data Word)	-27648-27648		
Overshoot/undershoot Range (Data Word)	Voltage: 32,511—27,649/-27,649 — -32,512; Current: 32,511—27,649/0 — -4864		
Overflow/Underflow (Data Word)	Voltage: 32,767—32,512/-32,513 — -32,768; Current: 32,767—32,512/-4865 — -32,768		
Resolution	12 bits + signal bits		
Max Voltage/Current Resistance	±60V/±40mA		
Precision (25°C/0-55°C)	full range ±0.1 %/±0.2 %		
Analog to digital Conversion Time	625µs (400 Hz inhibited)		
Working Signal Range	signal plus common mode voltage must be <+12V and >-12V		
Common mode Rejection	40dB, DC—60Hz		
Analog Output	2		
Number of Outputs	2		
Output Type	Voltage or current	Isolation (field side and logic side)	500VAC
Output Range	±10V, 0—20mA or 4—20mA	Precision (25°C/0-55°C)	full range ±0.3 %/±0.6 %
Current Output	0—20mA or 4—20mA	Stability Time	Voltage: 300µS(R), 750µS(1 uF); Current: 600µS(1 mH), 2 ms(10 mH)
Voltage Output	±10 V		
Data Word Format			
Voltage	-27648-27648	Load Impedance	Voltage: ≥ 1000 Ω; Current: ≤ 600 Ω
Current	0-27648	Output Status in STOP Mode	previous value or replacement value (default is 0)
Resolution		Diagnosis	
Voltage Mode	14 bits	Overflow/underflow	Support
Current Mode	13 bits	Voltage Mode: short circuit to ground	Support
Max Voltage Resistance	±60 V	Current Mode: circuit break mode	Support

Temperature modules

Model No.	SM1231 AI4 x 16 Bits TC	SM1231 AI8 x 16 Bits TC	SM1231 AI4 x 16 Bits RTD	SM1231 AI8 x 16 Bits RTD
Order No.	H7 231-5QD32-0XB0	H7 231-5QF32-0XB0	H7 231-5PD32-0XB0	H7 231-5PF32-0XB0
Picture				
Product Description	Analog input module AI4 x TC			Analogue input module AI8 x TC
Standard				Analogue input module AI4 x RTD
Dimension (W×H×D)	45x100x75			70x100x75
Power Consumption	1.5W			
Current Consumption (SM bus)	80mA			90mA
Current Consumption (24V DC)	40mA			
Analog Input				
Number of Inputs	4	8	4	8
Input Type	TC			RTD and Resistance
Type	J, K, T, E, R, S, B, N, C, TXK/XK (L) , Voltage Range: +/-80 mv			Platinum (Pt), copper (Cu), nickel (Ni), LG-Ni or resistance
Resolution				
Temperature	0.1 °C/0.1 °F			
Resistance	15 bits + signal bits			
Voltage Resistance	Max. ±60V			
Isolation	500VAC			
Noise Suppression	85dB at 10Hz/50Hz/60Hz/400Hz			
Channel to channel Isolation	120V AC			None
Common mode Rejection	> 120dB at 120VAC			>120 dB
Repeatability	±0.05 % FS			
The cold end temperature error	±1.5 °C			-
Cable Resistance	max. 100 Ω			20 Ω, 2.7 Ω, for 10 pcs Ω RTD
Diagnosis: Overflow/underflow	Support			
Circuit Break	Support			

H7-300

H7-300 series PLC products, mainly have digital value input and output module, analog value input and output module, temperature measurement module, communication interface module, and its variety is complete, flexible configuration combination. The products have been tested for many years in different markets and different industries, and have the advantages of stability, reliability and extremely high cost performance.

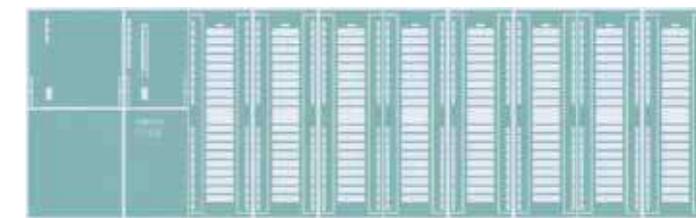
- Fully compatible with all cpus of the S7-300 series and the ET200M
- Seamless connection to the S7-1500 PROFINET remote IO
- Supports the redundant system S7-400H hot-swap
- Support S7-300 and H7-300 hybrid applications, flexible configuration, high cost effective
- The TIA Portal can be used for programming



Application Scenario

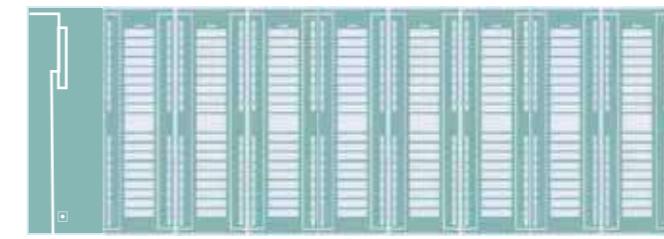
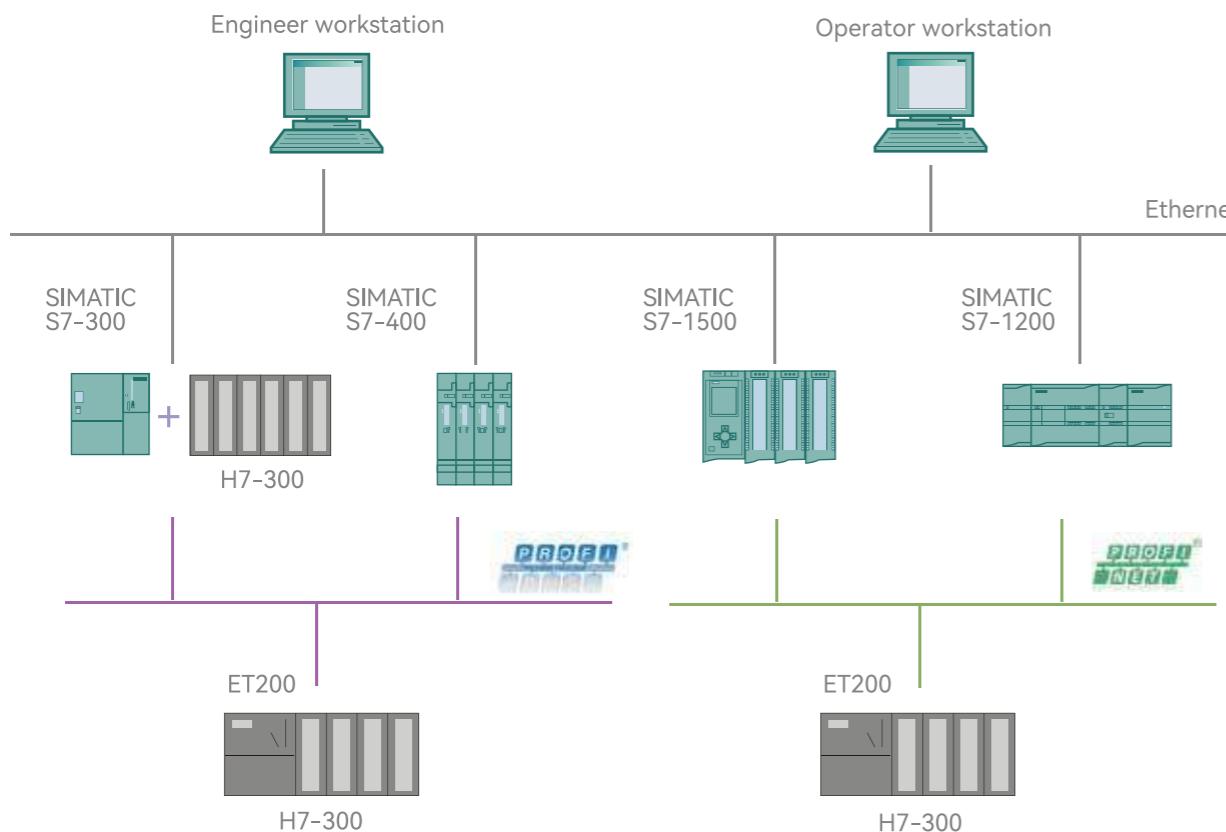
Compatible as 300 IO module

The H7-300 PLC can be used as the IO expansion module of the S7-300 CPU, which is directly connected to the CPU through the backplane, and its application method is the same with the S7-300 PLC IO module.



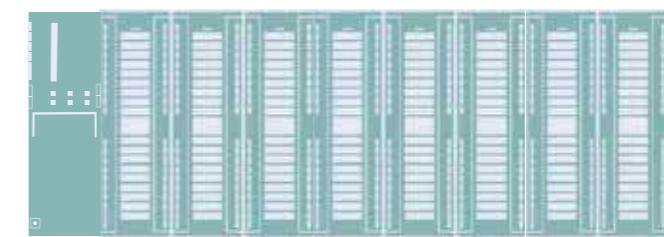
As a slave station module for ET200M

H7-300 PLC can be used as ET200M station, it has Profibus DP bus protocol interface module, and support to connect to S7-300/S7-400 Profibus DP master station CPU.



As a slave station module of PN 153-4

H7-300 PLC can be used as an extension of 153-4 Profinet bus protocol interface module. It supports applications as remote IO sites for Profinet main station CPUS such as the S7-1500.



Digital input modules

Model No.	SM 321 DI 16x24V DC	SM 321 DI 16x24V DC
Order No.	H7 321-1BH02-0AA0	H7 321-1BL00-0AA0
Picture		
Product Description	16-digital input, 24DC	32-digital input, 24DC
Standard		
Dimension(WxHxD)	40x125x117mm	
Power Consumption	Typical value 3.5W	Typical value 6.5W
Backplane bus current	30mA	35mA
Supply voltage	DC24V	
Front connector	20-pin	40-pin
Digital Input		
Number of Inputs	16	32
Input Type	Sinking type	
Input Voltage	24 VDC	
Rated Value	- 30 V to + 5 V	
Signal "0"	13V to 30V	
Signal "1"		
Input Current	Typical value 7mA	-
Input Delay	1.2ms-4.8ms	
"0" to "1" transition	1.2ms-4.8ms	
"1" to "0" transition	1.2ms-4.8ms	
Electrical isolation		
Between channel group	Support	
Counting each group between channels	16	
Between channel and backplane	Support	
Encoder		
2-wire system sensor	Support	
Allowable static current	Max. 1.5mA	
Cable Length(Max)		
Shield	500	
Unshielded	300	

Digital output modules

Model No.	SM 322 DO 16x24V DC	SM 322 DO 16xRLY	SM 322 DO 32x24V DC
Order No.	H7 322-1BH01-0AA0	H7 322-1HH01-0AA0	H7 322-1BL00-0AA0
Picture			
Product Description	16-digital output,24VDC	16-digital output, RLY	32-digital output, 24VDC
Standard			
Dimension(WxHxD)	40x125x117mm		
Power Consumption	Typical value 4.9W		Typical value 6.6W
Backplane bus current	30mA	50mA	35mA
Supply voltage	DC24V		
Front connector	20-pin	20-pin	40-pin
Digital Output			
Number of Outputs	16	32	
Switching frequency			
Resistive load	max.100Hz	max.10Hz	max.100Hz
Inductive load	max.0.5Hz		
Lamp Load	max.10Hz	max.1Hz	max.10Hz
Output short circuit protection	Support, electronic type	Not support	Support, electronic type
Output delay			
"0" to "1" transition	max.100us	-	max.100us
"1" to "0" transition	max.500us	-	max.500us
Electrical isolation			
Between channel group	Support		
Counting each group between channels	8		
Between channel and backplane	Support		
Cable Length (Max)			
Shield	500		
Unshielded	300		

Digital input/output module

Model No.	SM323 16DI/16DO
Order No.	H7 323-1BL00-0AA0
Picture	
Product Description	16-digital input /16-digital output, 24VDC
Standard	
Dimension(WxHxD)	40 x 125 x 117mm
Power Consumption	Typical value 6.5W
Backplane bus current	35mA
Supply voltage	DC24V
Front connector	40-pin
Digital Input	
Number of Inputs	16
Input Type	Sinking type
Input Voltage	
Rated Value	24 VDC
Signal "0"	-30 V to +5 V
Signal "1"	13 V to 30 V
Input Current	Typical value 7 mA
Input Delay	
"0" to "1" transition	1.2 ms-4.8 ms
"1" to "0" transition	1.2 ms-4.8 ms
Electrical isolation	
Between channel group	Support
Counting each group between channels	16
Between channel and backplane	Support
Encoder	
2-wire system sensor	Support
Allowable static current	max.1.5 mA
Digital Output	
Number of Outputs	16
Output short circuit protection	Support, electronic type
Output delay	
"0" to "1" transition	max.100 µs
"1" to "0" transition	max.500 µs
Electrical isolation	
Between channel group	Support
Counting each group between channels	8
Between channel and backplane	Support

Analog output modules

Model No.	SM332 4AO Current/Voltage
Order No.	H7 332-5HD01-0AB0
Picture	
Product Description	4-channel analog output module; Resolution 12 bits
Standard	
Dimension(WxHxD)	40 x 125 x 117mm
Power Consumption	Typical value 3 W
Backplane bus current	30mA
Supply voltage	DC24V
Front connector	20-pin
Analog Output	
Number of Outputs	4
Short circuit protection	Support
Output range	
Supply voltage	±10V, 0V to 10V, 1V to 5V
Electric current	±20mA, 0mA to 20 mA, 4mA to 20mA
Basic error limitation(operating limits at 25°C)	
Supply voltage	± 0.4 %
Electric current	± 0.6 %
Stability Time	
Resistive load	0.2 ms
Capacitive load	3.3 ms
Inductive load	0.5 ms(1mH)、3.3 ms (10mH)
Interrupt/diagnosis/status information	
diagnosis interrupt	Can be programmable
The diagnosis information can be readable	Support
Resolution	12 bits
Conversion time (each channel)	max. 0.8 ms
Replacement value of shutdown setting	Support
Electrical isolation	
Between channel and backplane bus	Support
Between channel and power supply	Support
Between channel and load voltage L+	Support
Conductor length	200m
Maximum load capacity	
Voltage output	min. 5000Ω
Current output	max. 500Ω

Analog input modules

Model No.	SM331 8AI Current/Voltage/RTD	SM331 8AI Full Function Type
Order No.	H7 331-1KF02-0AB0	H7 331-7KF02-0AB0
Picture		
Product Description	8-channel analog input; Current/voltage/RTD module Resolution 13 bits	8-channel analog input, full function temperature measurement module; External mechanical range switch; Current input with overcurrent protection; Resolution is 14 bits
Standard		
Dimension(WxHxD)	40 x 125 x 117mm	
Power Consumption	Typical value 1W	
Backplane bus current	120mA	30mA
Supply voltage	-	DC 24V
Front connector	40-pin	20-pin
Input Path		
Standard	8	
Resistive sensor	8	4
Constant current of resistive sensor		
Resistance thermometer and resistance measurement 0Ω to 600Ω	0.8mA	
Resistance measurement 0 to 6 kΩ, PTC, silicon temperature sensor	0.2mA	None
Input type and range		
Supply voltage	±50mV, ±500mV, 0V to 10V, ±1V, ±5V, ±10V, 1V to 5V	±80mV, ±250mV to ±500mV, ±1V, ±2.5V, ±5V, 1-5V, ±10V
Current (4 wires)	±20mA, 0mA to 20mA, 4mA to 20mA	±3.2mA, ±10mA, ±20mA, 0mA to 20mA, 4mA to 20mA
Current (2 wires)	-	4 mA to 20 mA
Resistor /PTC	0kΩ to 6kΩ, 0Ω to 600Ω, PTC	150Ω, 300Ω, 600Ω
RTD	Pt100 (standard/climatic) Ni100 (standard/climatic) Ni1000 (standard/climatic) LG-Ni1000 (standard/climatic) KTY83/110, KTY84/130	Pt100, Ni100
Thermocouple	None	Type E, N, J, K, L
Basic error limitation (operating limits at 25°C)		

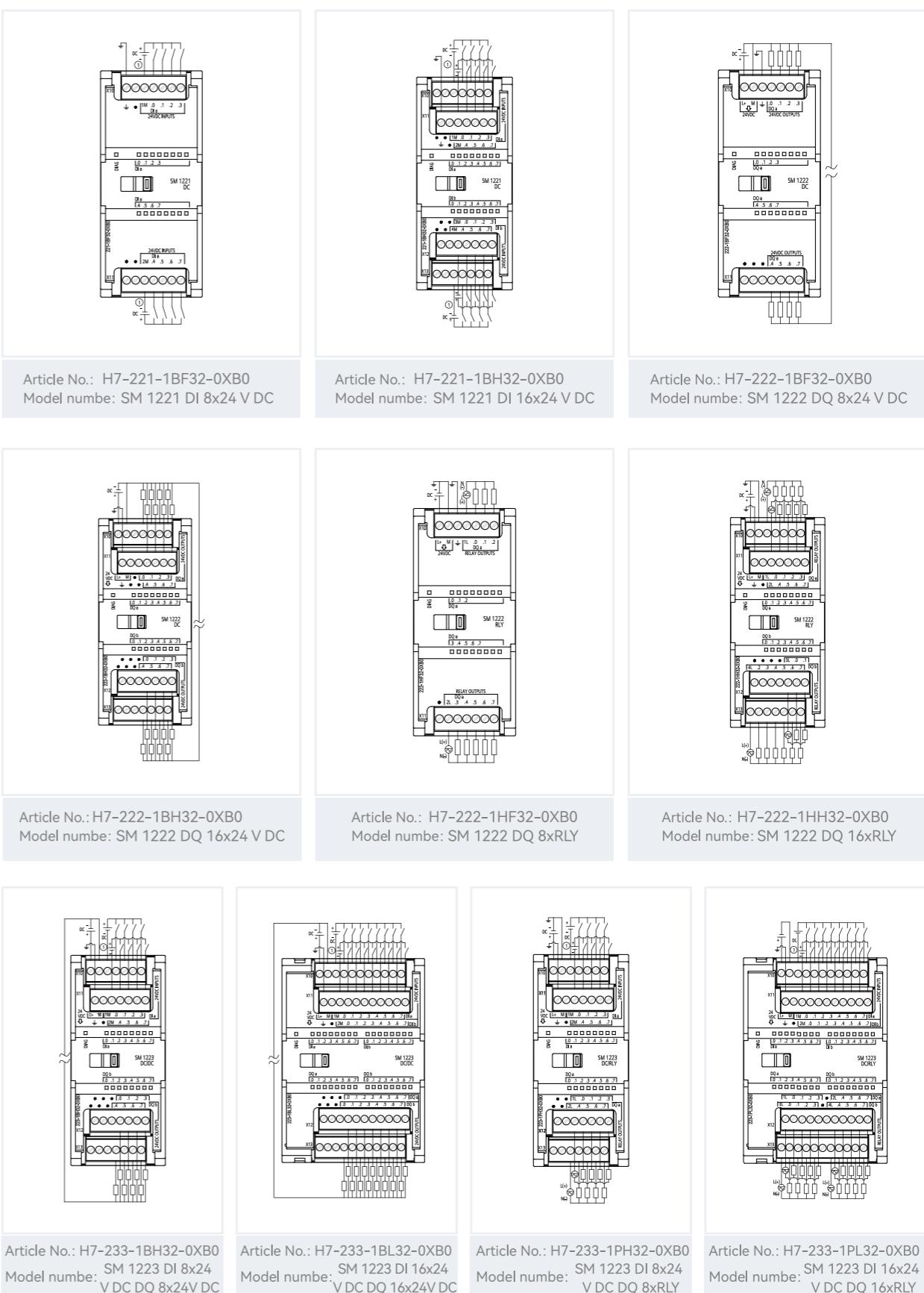
Analog input modules

Model No.	SM331 8AI Current/Voltage/RTD	SM331 8AI Full Function Type
Order No.	H7 331-1KF02-0AB0	H7 331-7KF02-0AB0
Supply voltage	±0.3%	±0.6%
Electric current	±0.3%	±0.5%
Resistance	±0.3%	±0.5%
Temperature	RTD Standard type: ±1K, RTD Cimatic type : ±2 K	Pt100/Ni100: ±0.5 % Thermocouple: ±0.7 %
Temperature compensation		
Internal temperature compensation	None	Support
External temperature compensation via compensation socket		None
Temperature compensation of 0°C reference junction	None	Support
Interrupt/diagnosis/status information		
Overrun interrupt	None	The channel 0 and 2
Diagnosis interrupt	None	Can be programmable
The diagnosis information can be readable	None	Support
Resolution	12 bits + symbol bits	13 bits + symbol bits
Electrical isolation		
Between channels		None
Between channel and backplane bus		Support
Conductor length	200m; max. 50m at 50mV	200m; 50m at 80mV, with thermocouple

IM153 Communication interface module

Model No.	IM153 Profibus DP Slave Interface Module	
Order No.	H7 153-1AA03-0XB0	
Picture		
Product Description	Interface modules for Profibus DP distributed I/O system Each slave station can connect 8 expansion modules of H7-300	
Standard		
Dimension (WxHxD)	40×125×120mm	
Power Consumption	3W	
Supply voltage	DC 24V	
Node Address	Allow 1-125	
Max. expansion module	8	
Communication Function		
Line protocol	PROFIBUS DP	
Port		
Profibus DP output current	max. 90mA	
Communication prt		
Point of junction	9-pin SUB-D	
Transmission method	RS-485	
Max. communication rate	12 Mbit/s automatic identification bus system	
Address space		
Output (Max.)	128 Byte	
Input (Max.)	128 Byte	
Configuration software	STEP7/COM PROFIBUS/application software of the third party, using GSD file	
Isolation voltage	500V	
Output voltage	5V DC	
Output current (at 5V DC)	Max. 1A (for backplane bus)	

Appendix1: H7-1200 Wiring diagram



Appendix3: H7-1200 Ordering data

H7-1200 Digital Module

Parameters		Article No.
SM1221	Digital input module DI8 x 24VDC , Drain type/source type	H7 221-1BF32-0XB0
SM1221	Digital input module DI16 x 24VDC , Drain type/source type	H7 221-1BH32-0XB0
SM1222	Digital output module DQ8x Relay type	H7 222-1HF32-0XB0
SM1222	Digital output module DQ8x 24VDC, Transistor type	H7 222-1BF32-0XB0
SM1222	Digital output module DQ16x Relay type	H7 222-1HH32-0XB0
SM1222	Digital output module DQ16x 24VDC, Transistor type	H7 222-1BH32-0XB0
SM1223	Digital input/output module DI8 x 24VDC Drain type/source type and DQ8 x Electric Relay, Electric Relay output	H7 223-1PH32-0XB0
SM1223	Digital input/output module DI8 x 24VDC Drain type/source type and DQ8 x 24VDC, Transistor type output	H7 223-1BH32-0XB0
SM1223	Digital input/output module DI16 x 24VDC Drain type/source type and DQ16 x Electric Relay, Electric Relay output	H7 223-1PL32-0XB0
SM1223	Digital input/output module DI16 x 24VDC Drain type/source type and DQ16 x 24VDC, Transistor type output	H7 223-1BL32-0XB0

H7-1200 Analog Module

Parameters		Article No.
SM1231	Analog input module AI4 x 13 bit, Support 0-20mA/4-20mA/±2.5V/±5V/±10V type	H7 231-4HD32-0XB0
SM1231	Analog input module AI8 x 13 bit, Support 0-20mA/4-20mA/±2.5V/±5V/±10V type	H7 231-4HF32-0XB0
SM1231	Analog input module AI4 x 16 bit, Support 0-20mA/4-20mA/±2.5V/±5V/±10V type	H7 231-5ND32-0XB0
SM1232	Analog output module AQ2 x 14 bit, Support 0-20mA/4-20mA/±10V type	H7 232-4HB32-0XB0
SM1232	Analog output module AQ4 x 14 bit, Support 0-20mA/4-20mA/±10V type	H7 232-4HD32-0XB0
SM1234	Analog I/O module AI4 + AQ2, input:13bit,Support 0-20mA/4-20mA/±2.5V/±5V/±10V type	H7 234-4HE32-0XB0

H7-1200 Temperature Module

Parameters		Article No.
SM1231	Analog input module AI4 x RTD Hot resistance	H7 231-5PD32-0XB0
SM1231	Analog input module AI4 x TC Thermocouple	H7 231-5QD32-0XB0
SM1231	Analog input module AI8 x RTD Hot resistance	H7 231-5PF32-0XB0
SM1231	Analog input module AI8 x TC Thermocouple	H7 231-5QF32-0XB0

Appendix3: H7-300 Ordering data

H7-300 Medium PLC Module

H7-300 Digital module		Article No.
SM321	Digital input module, 16DI	H7 321-1BH02-0AA0
SM321	Digital input module, 32DI	H7 321-1BL00-0AA0
SM322	Digital output module, 16DO	H7 322-1BH01-0AA0
SM322	Digital output module, 16DO, Electric Relay, 2A	H7 322-1HH01-0AA0
SM322	Digital output module, 32DO	H7 322-1BL00-0AA0
SM323	Digital input/output module, 16DI/16DO	H7 323-1BL00-0AA0
H7-300 Analog Module		Article No.
SM331	Analog input module, 8AI, Electric current/Supply voltage/Hot resistance	H7 331-1KF02-0AB0
SM331	Analog input module, 8AI,Intelligent	H7 331-7KF02-0AB0
SM332	Analog output module, 4AO	H7 332-5HD01-0AB0
SM332	Analog output module, 8AO	H7 332-5HF00-0AB0
H7-300 Interface Module		Article No.
IM153-1	Profibus DP interface Module	H7 153-1AA03-0XB0

H7 Attachment Products

300 Guide rail		Article No.
Guide rail	Installing gufe rails 160mm	H7 390-1AB60-0AA0
Guide rail	Installing gufe rails 483mm	H7 390-1AE80-0AA0
Guide rail	Installing gufe rails 530mm	H7 390-1AF30-0AA0
Guide rail	Installing gufe rails 830mm	H7 390-1AJ30-0AA0
Guide rail	Active guide rail, Hot swappable 483mm	H7 195-1GA00-0XA0
Guide rail	Active guide rail, Hot swappable 530mm	H7 195-1GF30-0XA0
Guide rail	Active guide rail, Hot swappable 620mm	H7 195-1GG30-0XA0
300 Front connector		Article No.
Front connector	20-pin front connector Screw type	H7 392-1AJ00-0AA0
Front connector	40-pin front connector Screw type	H7 392-1AM00-0AA0
PROFIBUS Product		Article No.
Bus connector	PROFIBUS Bus connector 90 degree outlet without programming port	H7 972-0BA12-0XA0
Bus connector	PROFIBUS Bus connector 90 degree outlet without programming port	H7 972-0BB12-0XA0
Bus connector	PROFIBUS Bus connector 35 degree outlet without programming port	H7 972-0BA41-0XA0
Bus connector	PROFIBUS Bus connector 35 degree outlet without programming port	H7 972-0BB41-0XA0
Bus cable	PROFIBUS Bus cable Two-core shielded twisted pair cable in Purple color	H7 830-0EH10
PROFINET Product		Article No.
Connector	PROFINET connector 90 degree outlet	H7 901-1BG10-0XA0
Connector	PROFINET connector 180 degree outlet	H7 901-1BB10-0XA0
Cable	PROFINET Cable, Four-core shielded twisted pair cable in Green color	H7 840-2AH10

Service and Warranty

The stage behind is the key to success, and after-sales service is the guarantee of life



3 years warranty

Within 3 years from the date of delivery, we can offer the unconditional free maintenance once occurring product quality problem.



Lifetime maintenance

We offer lifelong maintenance and repair services for the users of HUCEEN products