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2026

PLC and Expansion Modules

ZX100 / ZX200 PLC

S10 / H20 Expansion Modules



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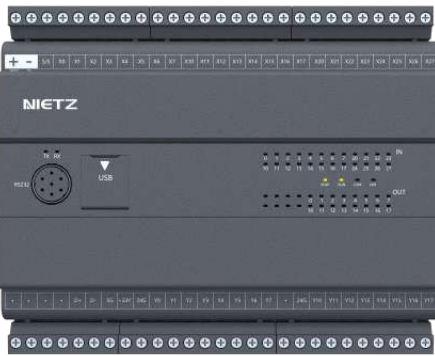


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ZX100 series PLC

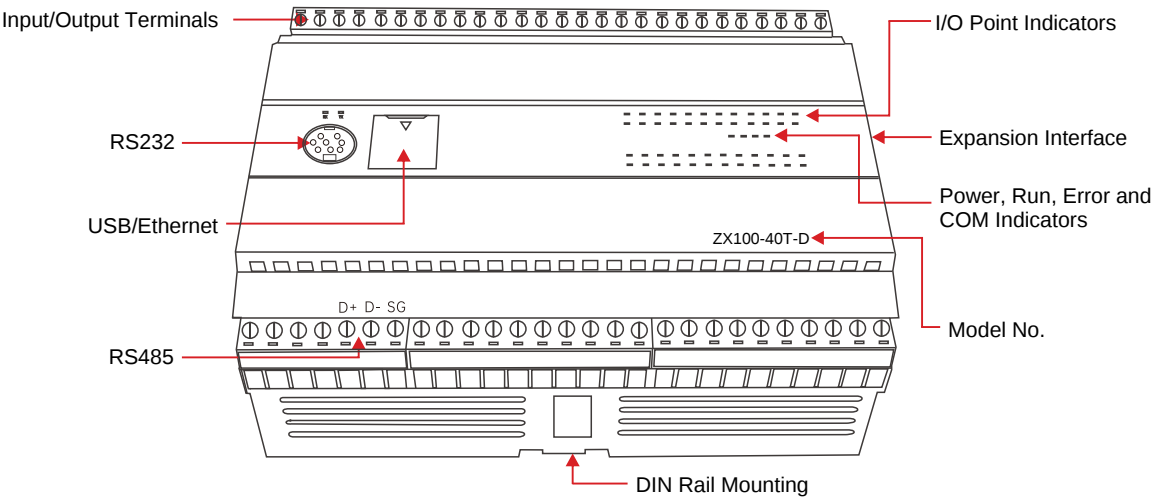
The ZX100 standard PLC series offers main units with 16 to 68 I/O points and digital I/Oexpansion modules ranging from 8 to 40 points, supporting a maximum configuration of 256 inputs and 256 outputs. Additionally, the series supports analog I/O, temperature, and weighing expansion modules, providing extensive expandability and stable performance to meet the requirements of diverse applications.



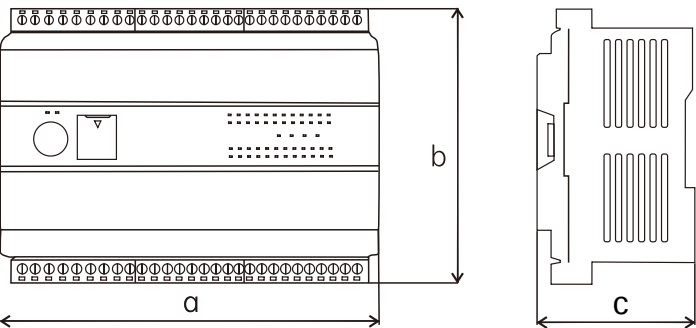
Performance Features

- Pulse Control Mode: Capable of driving up to 12 axes of stepper/servo motors.
- Supports 4-channel high-speed inputs with a maximum frequency of 200kHz.
- Equipped with dual communication ports RS232 and RS485, both supporting communication with HMI or PC; compatible with MODBUS ASCII and MODBUS RTU communication protocols.
- Adopts advanced power-off data retention technology for permanent program storage.
- Expandable to 256 isolated input points / 256 isolated output points.
- Program encryption function; program upload can be enabled or disabled to protect users' intellectual property rights.
- Programs can be downloaded via USB flash drive or downloaded & monitored using a double-headed USB cable for faster communication; the download speed reaches up to 12Mbps.
- Program capacity: 60K.

Interface Layout



Main Unit Dimensions



Main Unit (points)	Dimensions(mm)		
	a	b	c
14-16	60	110	61
24-40	141	110	61
48-68	201	110	61

Naming Rules

ZX100-40T4-2E-D S

① ② ③ ④ ⑤ ⑥ ⑦

① Product Series

② Main Unit I/O Points

Sign	Name
24	24 Points Main Unit
40	40 Points Main Unit
60	60 Points Main Unit

③ Output Type

Sign	Name
T	NPN Transistor Output
P	PNP Transistor Output
R	Relay Output

④ Driven Pulse Axes

Sign	Name
4	Drive 4 pulse-controlled axes
8	Drive 8 pulse-controlled axes
12	Drive 12 pulse-controlled axes

⑤ Ethernet Port Type

Sign	Name
E	1-channel Ethernet
C	1-channel CAN Bus Port
2E	2-channel Ethernet

⑥ Power Supply Type

Sign	Name
D	DC24V Power Supply
A	AC100V~240V Power Supply

⑦ Input Type

Sign	Name
S	NPN/PNP input
BLANK	NPN input

Input Point Electrical Specifications

Model		ZX100-14T-D	ZX100-16T-D	ZX100-24T3-D/A	ZX100-24T3-C-D/A	ZX100-24T6-D/A
Specifications						
Input Points		X0~X3	X4~	X0~X1	X2~X7,X10~	
Input Point Type		Digital Input			DC (Source Type)	
Input Type		DC24V,5mA			4.7KΩ	
Input Current						
Input Impedance						
Max. Frequency		50kHz	10kHz	200kHz	10kHz	
Respose Time	Off→On	<10μs	<20μs	<2.5μs	<20μs	
	On→Off	<20μs	<50μs	<5μs	<50μs	

Model		ZX100-32T4/R-D/A	ZX100-48T4-D	ZX100-60T4-D/A	ZX100-48T4/R-6AO-D/A
Specifications		ZX100-40T4-D/A	ZX100-60T12-D/A	ZX100-68T4-D/A	
Input Points		X0~X3		X6~X7,X10~	
Input Point Type		Digital Input			
Input Type		DC (Source Type)			
Input Current		DC24V,5mA			
Input Impedance		4.7KΩ			
Max. Frequency		200kHz		10kHz	
Respose Time	Off→On	<2.5μs		<20μs	
	On→Off	<5μs		<50μs	

Output Point Electrical Specifications

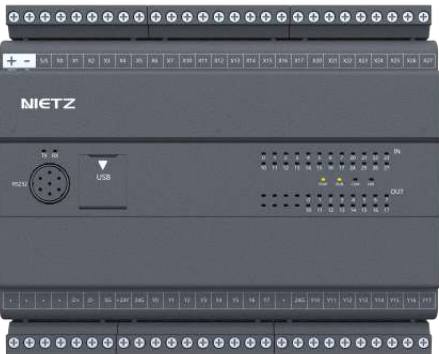
Model		ZX100-24T3-D/A	ZX100-24T3-C-D/A	ZX100-24T6-D/A	ZX100-32T8-D/A	ZX100-40T4-D/A	ZX100-60T4-D/A	ZX100-48T4-6AO-D/A	ZX100-60T12-D/A
Output Point Type		NPN		NPN		NPN		NPN	
Output Points		Y0,Y2,Y4	Y1,Y3,Y5~	Y0,Y2,Y4,Y6~	Y0,Y2,Y4,Y6	Y1,Y3,Y5,Y7~	Y0,Y2,Y4,Y6,Y10,Y12,Y14Y16	Y1,Y3,Y5,Y7,Y11,Y13,Y15,Y17	
Max. Frequency		200kHz	10kHz	200kHz	200kHz	10kHz	200kHz	10kHz	
Maximum Load	Resistive	0.3A/1 Point (2.4A/COM)							
	Inductive	15W							
Response Time	Off→On	<2μs	<20μs	<2μs	<2μs	<20μs	<2μs	<20μs	
	On→Off	<3μs	<30μs	<3μs	<3μs	<30μs	<3μs	<30μs	

ZX100:14-16 points



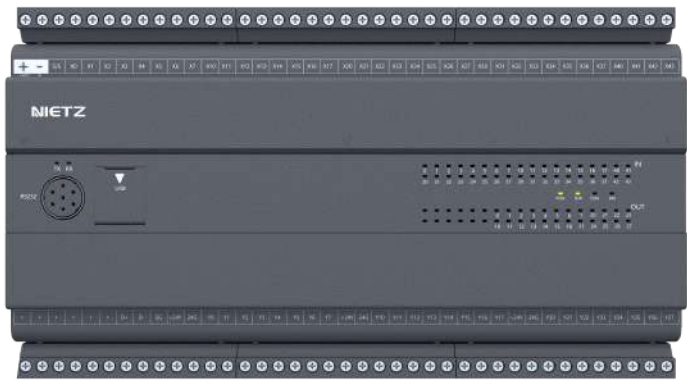
Series model ZX100	ZX100-14T2-D	ZX100-14T3L-D	ZX100-16 P/T 2-D
Power Supply Type	D:DC24V Power Supply A:AC100V~240V Power Supply "/" indicates that model selection is available.		
Input/Output type	T: Transistor NPN Output P: Transistor PNP Output; Transistor NPN Input "/" indicates that model selection is available.		
Total I/O points	14	14	16
Digital Input points	8	8	8
Digital Output points	6	6	8
High-speed Input Counter	3 Channels of A/B Phase		
Max. High-speed Input Frequency	200khz		
Right-side Module	16		
Left Expansion Module	None		
Maximum Number of Input Points	256		
Maximum Number of Output Points	256		
BD Board	None		
Serial Communication Port	RS232, RS485		
USB Communication Port	None		
Ethernet Port	None		
Number of Pulse Axes	4	3	2
Max. High-speed Output Frequency	200khz		
Program Capacity	60K		
Real-time Clock (RTC)	Support		
Dimensions (mm)	60*110*61		
C Language Support	Support		
Power Supply	DC24V		
Protection Class	IP20		
Operating Ambient Temperature	5 ~ 55°C (41 ~ 131°F), Non-condensing		
Relative Humidity	5 ~ 95%		
Transportation Ambient Temperature	-25 ~ 70°C (-13 ~ 158°F)		
Vibration Resistance	10M/S²		

ZX100:24-40 points



ZX100-	-32 P/T 8-D/A	-32 P/T R2-D/A	-32 P/T R4-D/A	-1622T 4-D	-40P/T4 -D/A	-1AI1AO-D	-40T4 -2AO-D	-1624T 4-D	-1410 P/T 4-D/A	-24 P/T 3-D/A	-24 P/T 6-D/A	-32 P/T 4-D/A
Power Supply Type	D:DC24V Power Supply A:AC100V~240V Power Supply "/" indicates that model selection is available.											
Input/Output type	T: Transistor NPN Output P: Transistor PNP Output; Transistor NPN Input "/" indicates that model selection is available.											
Total I/O points	32	32	32	38	40	40	40	40	24	24	24	32
Digital Input points	16	16	6	16	24	24 (includes 1 AI way, 1 AO way) (0~10V)	24 (with 2 built-inAO ways) (0~10V)	16	14	12	12	16
Digital Output points	16	16 (8 transistor ways, 8 relay ways)	16 (8 transistor ways, 8 relay ways)	22	16	16	16	24	10	12	12	16
High-speed Input Counter	3 Channels of A/B Phase											
Max.High-speed Input Frequency	200khz											
Right-side Module	16											
Left Expansion Module	IoT, RS-485 communication module											
Maximum Number of Input Points	256											
Maximum Number of Output Points	256											
BD Board	None											
Serial Communication Port	RS232, RS485											
USB Communication Port	Software Download / Firmware Upgrade											
Ethernet Port	None											
Number of Pulse Axes	8	2	4	4	4	4	4	4	4	3	6	4
Max. High-speed Output Frequency	200khz											
Program Capacity	60K											
Real-time Clock (RTC)	Support											
Dimensions (mm)	141*110*61											
C Language Support	Support											
Power Supply	DC24V											
Protection Class	IP20											
Operating Ambient Temperature	5 ~ 55°C (41 ~ 131°F), Non-condensing											
Relative Humidity	5 ~ 95%											
Transportation Ambient Temperature	-25 ~ 70°C (-13 ~ 158°F)											
Vibration Resistance	10M/s²											

ZX100:48-68 points



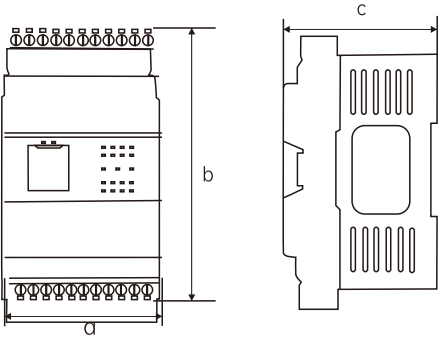
Series model ZX100	ZX100-48T4 -D/A	ZX100-48T12 -D/A	ZX100-48T4-6PTC -D/A	ZX100-48T12-6AO -D/A	ZX100-60T4 -D/A	ZX100-60T12 -D/A	ZX100-68T4 -D
Power Supply Type	D:DC24V Power Supply A:AC100V~240V Power Supply "/" indicates that model selection is available.						
Input/Output type	T: Transistor NPN Output P: Transistor PNP Output; Transistor NPN Input "/" indicates that model selection is available.						
Total I/O points	48	48	48	48	60	60	68
Digital Input points	24	24	24 (6 ways of Thermocouple / PT100 RTD inputs)	24 built-in 6-way 0~10V (0~4095) analog output	36	36	36
Digital Output points	24	24	24	24	24	24	32
High-speed Input Counter	3 Channels of A/B Phase						
Max. High-speed Input Frequency	200khz						
Right-side Module	16						
Left Expansion Module	None	None	None	IoT, RS-485 communication module			
Maximum Number of Input Points	256						
Maximum Number of Output Points	256						
BD Board	None						
Serial Communication Port	RS232, RS485						
USB Communication Port	Software Download / Firmware Upgrade						
Ethernet Port	None						
Number of Pulse Axes	4	12 (4 with a maximum of 50 kHz)	4	12 (4 with a maximum of 50 kHz)	4	12 (4 with a maximum of 50 kHz)	4
Max.High-speed OutputFrequency	200khz						
Program Capacity	60K						
Real-time Clock (RTC)	Support						
Dimensions (mm)	201*110*61						
C Language Support	Support						
Power Supply	DC24V						
Protection Class	IP20						
Operating Ambient Temperature	5 ~ 55°C (41 ~ 131°F), Non-condensing						
Relative Humidity	5 ~ 95%						
Transportation Ambient Temperature	-25 ~ 70°C (-13 ~ 158°F)						
Vibration Resistance	10M/S ²						

ZX100 Expansion: S10 Series

To meet application requirements across a wide range of scenarios, the main unit supports a variety of expansion modules. These modules fall primarily into categories such as digital I/O, analog I/O, temperature, and weighing modules. With diverse I/O point counts available with in each category, users can flexibly configure the system to match specific I/O requirements, achieving an optimal balance between performance and cost.



Dimensions



Expansion	Dimensions (mm)		
	a	b	c
Digital Expansion:8-16points Analog Expansion:S10-4S-A,S10-4AI2AO,S10-4AO,S10-4AOS,S10-4PT,S10-8PT,S10-2L,S10-4L,S10-2TCY,S10-4TCY,S10-2TC-A	60	110	60
DigitalExpansion:32-40points AnalogExpansion:S10-8TCY2、S10-8TCY	141	110	60

Naming Rules

S10 - 16 T - S S10 - 4 AI 2 AO S

① ② ③ ④ ① ② ⑤ ② ⑥ ④

- ① Product Series
- ② IO Points Count
- ③ Module Type

Sign	Name
T	NPN Transistor Out
P	PNP Transistor Out
R	Relay Output
X	Pure Input
YT	NPN Transistor-Only Output
YP	PNP Transistor-Only Output
YR	Relay-Only Output

④ Input Type

Sign	Name
S	NPN/PNP Bipolar Input
BLANK	NPN Input

- ⑤ Analog Input
- ⑥ Analog Output

Digital expansion

- Each input and output channel features opto-isolation, ensuring high reliability and strong interference immunity.
- The power supply includes reverse polarity protection and surge suppression, making it suitable for diverse operating environments.
- Maximum digital I/O capacity is 256 DI / 256 DO.
- A single base unit supports up to 16 expansion modules.

Digital Input Expansion	Model	Function	Specifications
	S10-8X	8-channel digital input	NPN input Powered by 24V DC; no external power supply required for inputs; maximum input frequency of 10 kHz.
	S10-16X	16-channel digital input	

Digital Output Expansion	Model	Function	Specifications
	S10-8YT	8-channel transistor output	Powered by 24V DC; no external power supply required. R: Relay output T: NPN transistor output R response time: Approx. 10 ms T response time: Approx. 50 μs R maximum output current: Max. 2 A T maximum output current: 0.3 A per point
	S10-16YT	16-channel transistor output	
	S10-16YR	16-channel transistor output	
	S10-32YT	32-channel transistor output	

Digital I/O Expansion	Model	Function	Specifications
	S10-8T	4-channel digital input, 4-channel transistor output	DC 24V power supply; no external power supply required for NPN inputs Maximum input frequency: 10 kHz R: Relay output T: NPN transistor output R response time: Approx. 10 ms T response time: Approx. 50 μs R maximum output current: Max. 2 A T maximum output current: 0.3 A per point
	S10-16T	8-channel digital input, 8-channel transistor output	
	S10-16R	8-channel digital input, 4-channel relay output	
	S10-32T	16-channel digital input, 16-channel transistor output	
	S10-32R	16-channel digital input, 16-channel relay output	
	S10-40T	24-channel digital input, 16-channel transistor output	

Analog expansion

Analog Output Expansion	Model	Function	Specifications
	S10-4AO	4-channel analog output	Voltage range: -10V to 10V Current range: 0 – 20mA; 4 – 20mA Resolution: 12-bit
	S10-4AOS	4-channel analog output	Voltage range: 0V to 10V Current range: 0 – 20mA; 4 – 20mA Resolution: 12-bit

Analog expansion

Analog I/O Expansion	Model	Function	Specifications
	S10-4AI2AO	4-channel analog input 2-channel analog output	Voltage range: (Input/Output: -10V to 10V) Current range: (Input/Output: 0– 20mA; 4– 20mA) Resolution: 12-bit/12-bit
	S10-4hAI2AO	4-channel analog input 2-channel analog output	Voltage range: (Input/Output: -10V to 10V) Current range: 0– 20 mA; 4– 20 mA Resolution: 16-bit/12-bit

Temperature Expansion	Model	Function	Specifications
	S10- 2TCY	2-channel NPN temperature input (with optocoupler isolation between channels) 2-channel NPN transistor output	Supports K-type thermocouples; measurement range 0– 900°C, accuracy 1°C.
	S10- N2TCY	2-channel NPN temperature input (without optocoupler isolation between channels) 2-channel NPN transistor output	
	S10- 2TCY2	2-channel temperature input (with optocoupler isolation between channels) 2-channel NPN transistor output,with RS485	
	S10- 4TCY	4-channel temperature input (with optocoupler isolation between channels) 4-channel NPN transistor output 4	
	S10- N4TCY	4 -channel temperature input (without optocoupler isolation between channels) 4-channel NPN transistor output	
	S10- 4TCY2	4-channel temperature input (with optocoupler isolation between channels) 4-channel NPN transistor output,with RS485	
	S10- N4TCY2	4-channel temperature input (without optocoupler isolation between channels) 4-channel NPN transistor output,with RS485 8	
	S10- 8TCY	8-channel temperature input (with optocoupler isolation between channels) 8-channel NPN transistor output	
	S10- 8TCY2	8-channel temperature input (with optocoupler isolation between channels) 8-channel NPN transistor output,with RS485	
	S10- 8PT	8-channel temperature input (with optocoupler isolation between channels)	Supports PT100; measurement range -50 to 300°C; accuracy 1°C.
	S10- 2TC-A	2-channel temperature input, 2-channel SSR output	Supports PT100/K-type thermocouples Max measurement range 300°C , accuracy 1°C.

Weighing Expansion	Model	Function	Specifications
	S10-2L	2-channel weighing input	Powered by 24V DC (no external power supply required); 24-bit resolution, ±1% accuracy.
	S10-4L	4-channel weighing input	Powered by 24V DC (no external power supply required); 24-bit resolution, ±1% accuracy.

Thyristor Output Expansion	Model	Function	Specifications
	S10-4S-A	4-Channel SSR with Thyristor Output	Powered by 24V DC; drives AC vibratory bowl feeders up to 500W without requiring an external power supply.

ZX200 series PLC

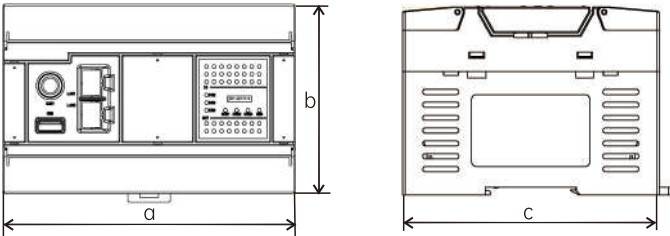
The ZX200 series PLC offers main units with 16 to 60 I/O points and digital I/O expansion modules ranging from 8 to 40 points, supporting a maximum configuration of 256/256 I/O points. The system also supports analog I/O, temperature, and weighing expansion modules, providing extensive expandability and stable performance to meet the requirements of diverse applications.



Performance Features

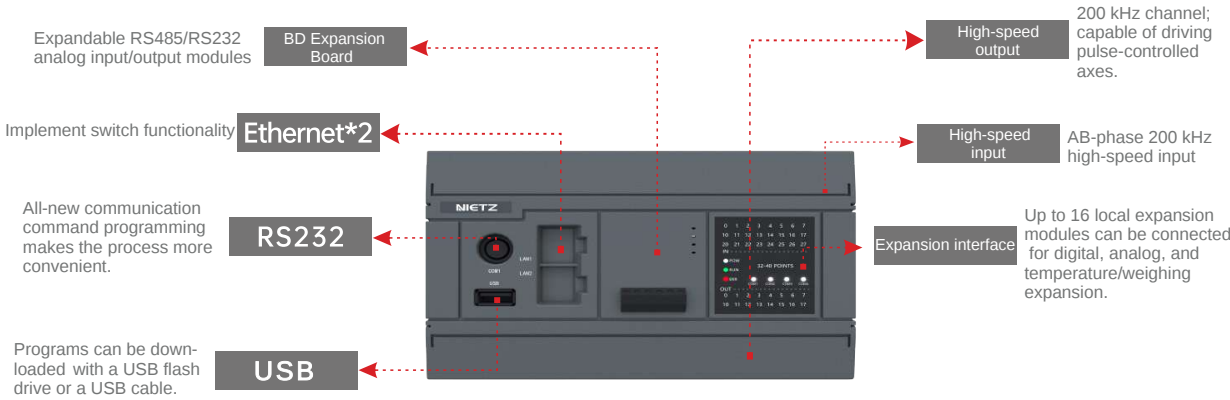
- High-speed I/O: Supports up to 4 channels of A/B phase high-speed inputs and 12 axes of high-speed outputs.
- Ethernet functionality: Supports online monitoring, program downloading, Modbus TCP/IP communication, and free-protocol communication.
- Dual communication ports (RS232 and 2x RS485): Both support communication with HMI or PCs and are compatible with Modbus ASCII and Modbus RTU protocols.
- Advanced power-loss data retention technology ensures permanent program storage.
- Extensive expansion capabilities: Digital I/O can be expanded up to 512 points; additional modules for analog I/O, weighing, and temperature sensing are also supported.
- Program encryption and upload protection: Users can choose whether to allow program uploads, thereby safeguarding intellectual property.
- Flexible programming methods: Programs can be downloaded via USB flash drive or a dual-ended USB cable; supports high-speed communication with download rates up to 12 Mbps.

Dimension



Main Unit (points)	Dimensions(mm)		
	a	b	c
14-24	114	100	73
32-40	155	100	73
48-60	218	100	73

Interface Layout



Naming Rules

ZX200 – 40 T 4 – 2E – D S – M
① ② ③ ④ ⑤ ⑥ ⑦

① Product Series

② Main Unit I/O Points

Sign	Name
24	24 Points Main Unit
40	40 Points Main Unit
60	60 Points Main Unit

③ Output Type

Sign	Name
T	NPN Transistor Output
P	PNP Transistor Output
R	Relay Output

④ Driven Pulse Axes

Sign	Name
4	Drive 4 pulse-controlled axes
8	Drive 8 pulse-controlled axes
12	Drive 12 pulse-controlled axes

⑤ Ethernet Port Type

Sign	Name
E	1-channel Ethernet
C	1-channel CAN Bus Port
2E	2-channel Ethernet

⑥ Power Supply Type

Sign	Name
D	DC24V Power Supply
A	AC100V~240V Power Supply

⑦ Input Type

Sign	Name
S	NPN/PNP input
BLANK	NPN input

Electronic Cam Control Function	
Sign	Name
M	with Electronic Cam Control Function
BLANK	without Electronic Cam Control Function

Input Point Electrical Specifications

Series Models ZX200		16T(P/R), 24T(P/R)		32T(P/R), 40T(P/R), 48T(P/R) 60T(P/R)	
Input Points		X0~X5	X6~	X0~X7	X10~
Input Point Type		Digital Input			
Input Type		DC (NPN type)			
Input Current		5mA			
Input Impedance		4.7KΩ			
Max. Frequency		200kHz	10kHz	200kHz	10kHz
Response Time	Off→On	<2.5μs	<20μs	<2.5μs	<20μs
	On→Off	<5μs	<50μs	<5μs	<50μs

Output Point Electrical Specifications

Series Models ZX200		16T/P4, 24T/P4, 32T/P4, 40T/P4, 48T/P4, 60T/P4	32T/P8, 40T/P8	48T/P8, 60T/P12
Output Points		Y0, Y2, Y4, Y6	Y1, Y3, Y5, Y7~Y17	Y0, Y2...Y26
Max. Frequency		200kHz	10kHz	200kHz
Maximum Load	Resistive	0.3A/1 Point (2.4A/COM)		
	Inductive	15W		
Response Time	Off→On	<2μs	<20μs	<2μs
	On→Off	<3μs	<30μs	<3μs

ZX200:16-24 points



ZX200-	-16P/T 2-D/A(-M)	-16P/T4-D/A(-M)	-24 P/T2-D/A(-M)	-24 P/T4-D/A(-M)	-1212 P/T4-D/A(-M)	-1212 P/T6-D/A(-M)	-1410 P/T3-D/A(-M)
Power Supply Type	D:DC24V Power Supply A:AC100V~240V Power Supply "/" indicates that model selection is available.						
Input/Output type	T: Transistor NPN Output P: Transistor PNP Output; Transistor NPN Input "/" indicates that model selection is available.						
Electronic Cam Control Function	With M : with Electronic Cam Control Function Blank: without Electronic Cam Control Function model selection is available.						
Total I/O points	16	16	24	24	24	24	24
Digital Input points	8	8	14	14	12	14	14
Digital Output points	8	8	10	10	12	10	10
High-speed Input Counter	3 Channels of A/B Phase						
Max. High-speed Input Frequency	200khz						
Right-side Module	16						
Left Expansion Module	None					IoT, RS-485 communication module	
Maximum Number of Input Points	256						
Maximum Number of Output Points	256						
BD Board	Supports 1						
Serial Communication Port	RS232、RS485*2						
USB Communication Port	Software Download / Firmware Upgrade						
Ethernet Port	Supports 1						
Number of Pulse Axes	2	4	2	4	4	6	3
Max. High-speed Output Frequency	200khz						
Program Capacity	60K						
Real-time Clock (RTC)	support						
Dimensions (mm)	114*100*73						
C Language Support	Support						
Power Supply	DC24V						
Protection Class	IP20						
Operating Ambient Temperature	5 ~ 55°C (41 ~ 131°F), Non-condensing						
Relative Humidity	5 ~ 95%						
Transportation Ambient Temperature	-25 ~ 70°C (-13 ~ 158°F)						
Vibration Resistance	10M/S ²						

ZX200:32-40 points



Series model ZX200	ZX200-32 P/T 4-D/A(-M)	ZX200-32 P/T 8-D/A(-M)	ZX200-40 P/T 4-D/A(-M)	ZX200-40 P/T 8-D/A(-M)
Power Supply Type	D:DC24V Power Supply A:AC100V~240V Power Supply "/" indicates that model selection is available.			
Input/Output type	T: Transistor NPN Output P: Transistor PNP Output; Transistor NPN Input "/" indicates that model selection is available.			
Electronic Cam Control Function	With M : with Electronic Cam Control Function Blank: without Electronic Cam Control Function model selection is available.			
Total I/O points	32	32	40	40
Digital Input points	16	16	24	24
Digital Output points	16	16	16	16
High-speed Input Counter	4 Channels of A/B Phase			
Max. High-speed Input Frequency	200khz			
Right-side Module	16			
Left Expansion Module	IoT, RS-485 communication module			
Maximum Number of Input Points	256			
Maximum Number of Output Points	256			
BD Board	Supports 1			
Serial Communication Port	RS232、RS485*2			
USB Communication Port	Software Download / Firmware Upgrade			
Ethernet Port	Supports 1			
Number of Pulse Axes	4	8	4	8
Max. High-speed Output Frequency	200khz			
Program Capacity	60K			
Real-time Clock (RTC)	Support			
Dimensions (mm)	155*100*73			
C Language Support	Support			
Power Supply	DC24V			
Protection Class	IP20			
Operating Ambient Temperature	5 ~ 55℃ (41 ~ 131°F), Non-condensing			
Relative Humidity	5 ~ 95%			
Transportation Ambient Temperature	-25 ~ 70℃ (-13 ~ 158°F)			
Vibration Resistance	10M/S²			

ZX200:48-60 points



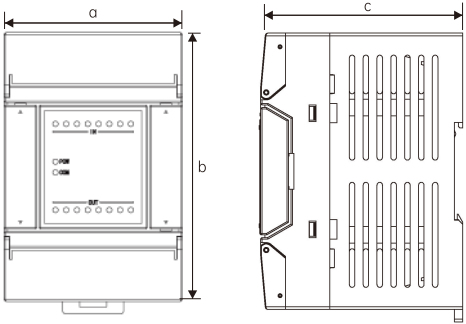
Series model ZX200	ZX200-48 P/T 4-D/A(-M)	ZX200-48 P/T 12-D/A(-M)	ZX200-60 P/T 4-D/A(-M)	ZX200-60 P/T 12-D/A(-M)
Power Supply Type	D:DC24V Power Supply A:AC100V~240V Power Supply "/" indicates that model selection is available.			
Input/Output type	T: Transistor NPN Output P: Transistor PNP Output; Transistor NPN Input "/" indicates that model selection is available.			
Electronic Cam Control Function	With M : with Electronic Cam Control Function Blank: without Electronic Cam Control Function model selection is available.			
Total I/O points	48	48	60	60
Digital Input points	24	24	36	36
Digital Output points	24	24	24	24
High-speed Input Counter	4 Channels of A/B Phase			
Max. High-speed Input Frequency	200khz			
Right-side Module	16			
Left Expansion Module	IoT, RS-485 communication module			
Maximum Number of Input Points	256			
Maximum Number of Output Points	256			
BD Board	Supports 2			
Serial Communication Port	RS232、RS485*2			
USB Communication Port	Software Download / Firmware Upgrade			
Ethernet Port	Supports 1			
Number of Pulse Axes	4	12 (4 with a maximum of 50 kHz)	4	12 (4 with a maximum of 50 kHz)
Max. High-speed Output Frequency	200khz			
Program Capacity	60K			
Real-time Clock (RTC)	Support			
Dimensions (mm)	218*100*73			
C Language Support	Support			
Power Supply	DC24V			
Protection Class	IP20			
Operating Ambient Temperature	5 ~ 55℃ (41 ~ 131°F), Non-condensing			
Relative Humidity	5 ~ 95%			
Transportation Ambient Temperature	-25 ~ 70℃ (-13 ~ 158°F)			
Vibration Resistance	10M/S ²			

ZX200 Expansion: H2O Series

To meet application requirements across a wide range of scenarios, the main unit supports a variety of expansion modules. These modules fall primarily into categories such as digital I/O, analog I/O, temperature, and weighing modules. With diverse I/O point counts available within each category, users can flexibly configure the system to match specific I/O requirements, achieving an optimal balance between performance and cost.



Dimensions



Expansion	Dimensions (mm)		
	a	b	c
Digital Expansion:8-16points Analog Expansion:H20-4AI2AO,H20-4AO,H20-8AO,H20-8AI, H20-2I,H20-4L,H20-2TCY,H20-2TCY2,H20-4TCY,H20-4TCY2, H20-8PT,H20-4PT,H20-4PT2	66	100	73
Digital Expansion : 24-32 points、H20-8AI4AOS2、 H20-8AI8AOS2、H20-8PT2	114	100	73

Naming Rules

H20-16 T-S H20-4 AI 2 AO S
① ② ③ ④ ① ② ⑤ ② ⑥ ④

- ① Product Series
- ② IO Points Count
- ③ Module Type

Sign	Name
T	NPN Transistor Out
P	PNP Transistor Out
R	Relay Output
X	Pure Input
YT	NPN Transistor-Only Output
YP	PNP Transistor-Only Output
YR	Relay-Only Output

④ Input Type

Sign	Name
S	NPN/PNP Bipolar Input
BLANK	NPN Input

- ⑤ Analog Input
- ⑥ Analog Output

Digital expansion

- Each input and output channel features opto-isolation, ensuring high reliability and strong interference immunity.
- The power supply includes reverse polarity protection and surge suppression, making it suitable for diverse operating environments. Maximum digital I/O capacity is 256 DI / 256 DO.
- A single base unit supports up to 16 expansion modules.

Digital Input Expansion	Model	Function	Specifications
	H20-8X	8-channel digital NPN input	Powered by 24V DC; no external power supply required; maximum input frequency of 10 kHz.
	H20-8X-S	8-channel digital NPN/PNP input	
	H20-16X	16-channel digital NPN input	
	H20-16X-S	16-channel digital NPN/PNP input	
	H20-16X2	16-channel digital NPN input, 1 RS485 port	

Digital Output Expansion	Model	Function	Specifications
	H20-8YT	8-channel transistor NPN output	Powered by 24V DC; no external power supply required. R: Relay output T: NPN transistor output P: PNP transistor output R response time: Approx. 10 ms T/P response time: Approx. 50 µs R maximum output current: Max. 2 A T/P maximum output current: 0.3 A per point
	H20-16YT	16-channel transistor NPN output	
	H20-8YR	8-channel relayoutput	
	H20-16YR	16-channel relayoutput	
	H20-32YT	32-channel transistor NPN output	
	H20-32YR	32-channel relayoutput	

Digital I/O Expansion	Model	Function	Specifications
	H20-8T	4-channel digital input, 4-channel transistor output	DC24V power supply; no external power source required. NPN input; maximum input frequency: 10 kHz. Output types: R (Relay), T (NPN Transistor), P (PNP Transistor). Input types: S (NPN/PNP bipolar), or default (NPN). Response time: approx. 10 ms for R; approx. 50 µs for T/P. Maximum output current: 2 A for R; 0.3 A per point for T/P.
	H20-8T(/P)-S	4-channel digital input, 4-channel transistor output	
	H20-16T	8-channel digital input, 8-channel transistor output	
	H20-16T2	8-channel digital input, 8-channel transistor output 1 RS485 port	
	H20-16T(/P)-S	8-channel digital input, 8-channel transistor output	
	H20-16R	8-channel digital input, 8-channel transistor output	
	H20-16R-S	8-channel digital input, 8-channel transistor output	
	H20-32T	16-channel digital input, 16-channel transistor output	
	H20-32T(/P)-S	16-channel digital input, 16-channel transistor output	
	H20-32R	16-channel digital input, 16-channel transistor output	
	H20-32R-S	16-channel digital input, 16-channel transistor output	
	H20-40T	24-channel digital input, 16-channel transistor output	
	H20-40T(/P)-S	24-channel digital input, 16-channel transistor output	

BD Board	Model	Function	Specifications
	HBD-1AI1AOS	1 analog input, 1 analog output	Voltage range: 0V– 10V; C urrent range: 0– 20mA
	HBD-2AI	2 analog input	
	HBD-2AOS	2 analog output	
	HBD-2RS485	2 RS485 port	With isolation
	HBD-2TC	2-channel temperature acquisition input	2-channel K-type thermocouple temperature acquisition input
	HBD-CAN	1-channel CAN bus	Supports 16 slave stations, such as servo drives, stepper drives, valve islands, etc.
	HBD-1L	1-channel weighing input	24-bit resolution, 0.1g precision
	HBD-2PT	2-channel temperature input	Supports Pt100 or NTC sensors; measurement range: -50 to 300°C.
	HBD-4YT	4-channel digital output	T: NPN output; P: PNP output

Analog expansion

Analog Input Expansion	Model	Function	Specifications
	H20-4AI	4-channel analog input	Voltage range: 0V– 10V Current range: 0– 20mA Resolution: 12-bit
	H20-4AI2	4-channel analog input, 1 RS485 port	
	H20-8AI	8-channel analog input	
	H20-8AI2	8-channel analog input , 1 RS485 port	

Analog Output Expansion	Model	Function	Specifications
	H20-4AO	4-channel analog output	Voltage range: 0V– 10V Current range: 0– 20mA ; 4-20mA Resolution: 12-bit
	H20-8AO	8-channel analog output	

Analog I/O Expansion	Model	Function	Specifications
	H20-4AI2AO	4-channel analog input,8-channel analog output	Voltage range: (Input: 0– 5V, 0– 10V) (Output: -10V– 10V) Current range: (Input/Output: 0– 20mA; 4– 20mA) Resolution: 12-bit
	H20-4AI2AO2	4-channel analog input,8-channel analog output , 1 RS485 port	
	H20-8AI4AOS2	8-channel analog input,4-channel analog output , 1 RS485 port	
	H20-8AI8AOS2	8-channel analog input,4-channel analog output , 1 RS485 port	

Temperature Expansion	Model	Function	Specifications
	H20-2TCY	2-channel temperature input, 2-channel NPN transistor output	Supports K-type thermocouples; measurement range: 0-900°C; accuracy: 1°C.
	H20-2TCY2	2-channel temperature input, 2-channel NPN transistor output with RS485	
	H20-4TCY	4-channel temperature input, 4-channel NPN transistor output	
	H20-4TCY2	4-channel temperature input, 4-channel NPN transistor output with RS485	
	H20-8TC	8-channel temperature input	
	H20-8TCY	2-channel temperature input, 2-channel NPN transistor output	
	H20-8TCY2	8-channel temperature input, 8-channel NPN transistor output with RS485	Supports PT100; measurement range: -50 to 300°C; accuracy: 1°C.
	H20-4PT	4-channel temperature input	
	H20-4PT2	4-channel temperature input,with RS485	
	H20-8PT	8-channel temperature input	
	H20-8PT2	8-channel temperature input,with RS485	

Weighing Expansion	Model	Function	Specifications
	H20-2L	2-channel weighing input	Powered by 24V DC (no external power supply required); 24-bit resolution, ±1% accuracy.
	H20-4L	4-channel weighing input	