



SOLIDOT Fieldbus Technology

Product Catalog 2023 v1.1



Nanjing Solidot Electronic Technology Co., Ltd.

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COMPANY INTRODUCTION

Solidot core team was founded in 2012 and developed the first generation of domestic slice I/O module in the following year. In 2018, Solidot underwent business restructuring, focusing its strategic core on the research and development of automation bus technology and products. The company has now completed multiple rounds of equity financing, has successfully been selected for the list of unicorn enterprises in Nanjing, and has become a leading supplier of automation bus technology, products, and solutions in China.

Over the years, Solidot has focused on industrial bus technology to achieve interconnectivity of industrial products. The products have been widely used in industries and fields such as 3C, new energy, logistics, welding, water treatment, building control, and factory monitoring.

BUSINESS VISION

Leading Industrial interconnection, Making Smart Manufacturing easier.



DEVELOPMENT HISTORY

2022 Completed multiple rounds of financing and received favor from industrial capital, released slice multi-channel temperature controller, which supports various bus protocols

2021 Included in the list of unicorn enterprises cultivated in Nanjing Released the first slice stepper driver in China Can support various bus protocols

2020 Awarded high-tech enterprise certification Released horizontal I/O with multiple protocol support

2019 Completed Pre-A round of financing led by well-known government capital Released X-bus1.0 backplane protocol, based on which XB6 series high performance slice I/O was released

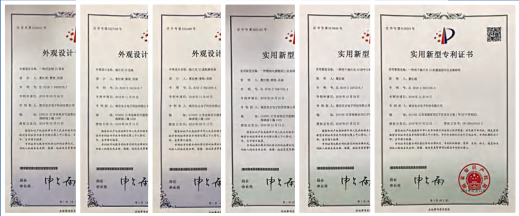
2018 Went through business reorganization Released Vertical I/O, supporting multiple protocols Completed angel funding round

CERTIFIED PATENTS

Certifications



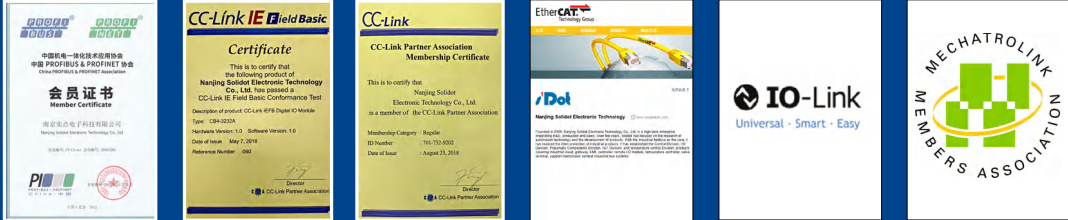
Patent Certificates



Computer software copyright registration certificates



Association membership certificates



INDUSTRY APPLICATIONS





Slice I/O

The innovative channel indicator design is adopted as the indicators are placed close to the channels, channel status is displayed intuitively and clearly, facilitating detection and maintenance. Terminal blocks are equipped with a spring-loaded connection, which is easy to pull and plug as well as quick to wire. Up to 32 modules and 1024 I/O points can be accommodated to save space and reduce costs. A variety of bus protocols are supported in the current market. High-speed backplane bus is applied to guarantee faster transfer rate, as the scan cycle is less than 1ms. Star topology and distributed clock are supported.



Vertical Type I/O

Compact structure and small footprint, only measuring 102 mm × 72 mm × 25 mm. It takes up little space and runs fast. Terminal blocks are equipped with a spring-loaded connection, which is easy to pull and plug as well as quick to wire. Support a variety of bus protocols, adaptable to most manufacturers' master stations such as Siemens, Omron, Mitsubishi, etc. Simple configuration and cascable capability. Protection level is IP20.



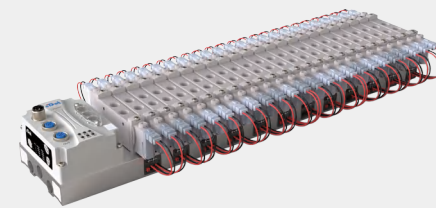
Horizontal Type I/O

The height of the product is only 35mm, occupying little space, and can be flexibly adapted to complex industrial site environment. The innovative channel indicator design is adopted as the indicators are placed close to the channels, channel status is displayed intuitively and clearly, facilitating detection and maintenance. Support a variety of bus protocols, adaptable to most manufacturers' master stations such as Siemens, Omron, Mitsubishi, etc. Terminal blocks are equipped with a screw-type connection, which is stable and easy-wiring.



I/O Link

Up to IP67 protection level, suitable for harsh working environment. IO-Link v1.1 standard version is adopted. PROFINET, EtherCAT, EtherNet/IP, CC-Link IE Field Basic and other bus protocols are supported. The LED indicator provides channel-level protection and diagnostics.



Valve Terminal

The first domestic, self-developed valve terminal. Universal, compatible with SMC, FESTO, CKD, AirTAC and other mainstream solenoid valve models, support a variety of bus protocols. Additionally, the baseplate can be customized according to the numbers and models of solenoid valve based on customer demands. The baseplate is designed with aluminum alloy, which not only increases the mechanical performance of the product, but also increase the aesthetic of the product.



Motion Control

Solidot boasts leading product lines in China's motion control field, including multi-protocol stepper driver modules, pulse positioning modules, PWM output modules, encoder counter modules and many other highly competitive products



Protocol Gateway

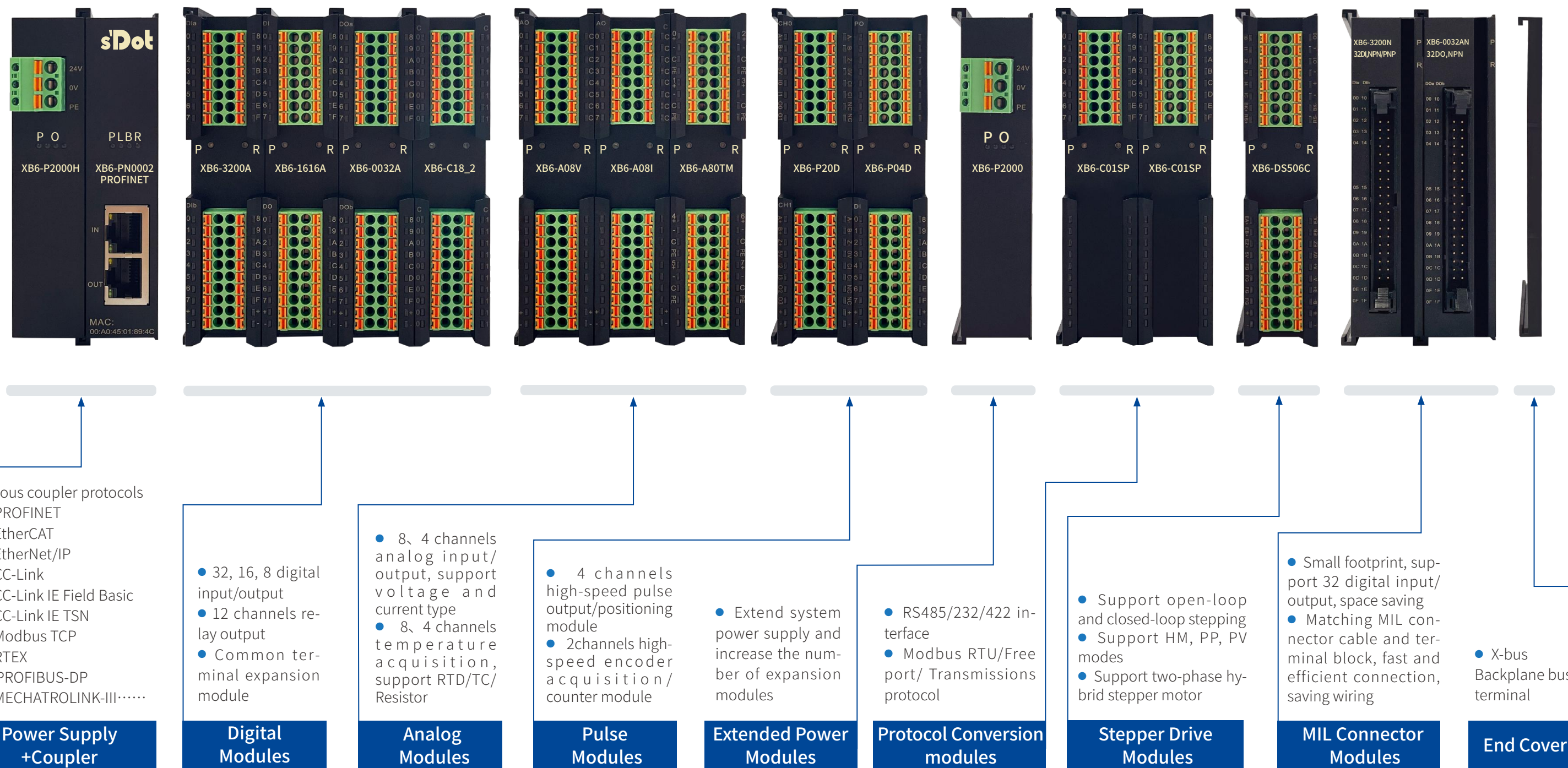
The protocol gateway supports a variety of mainstream protocol transformation, which can realize the communication between different protocol masters, and also supports serial interfaces such as RS485/RS232.



EtherCAT Switch

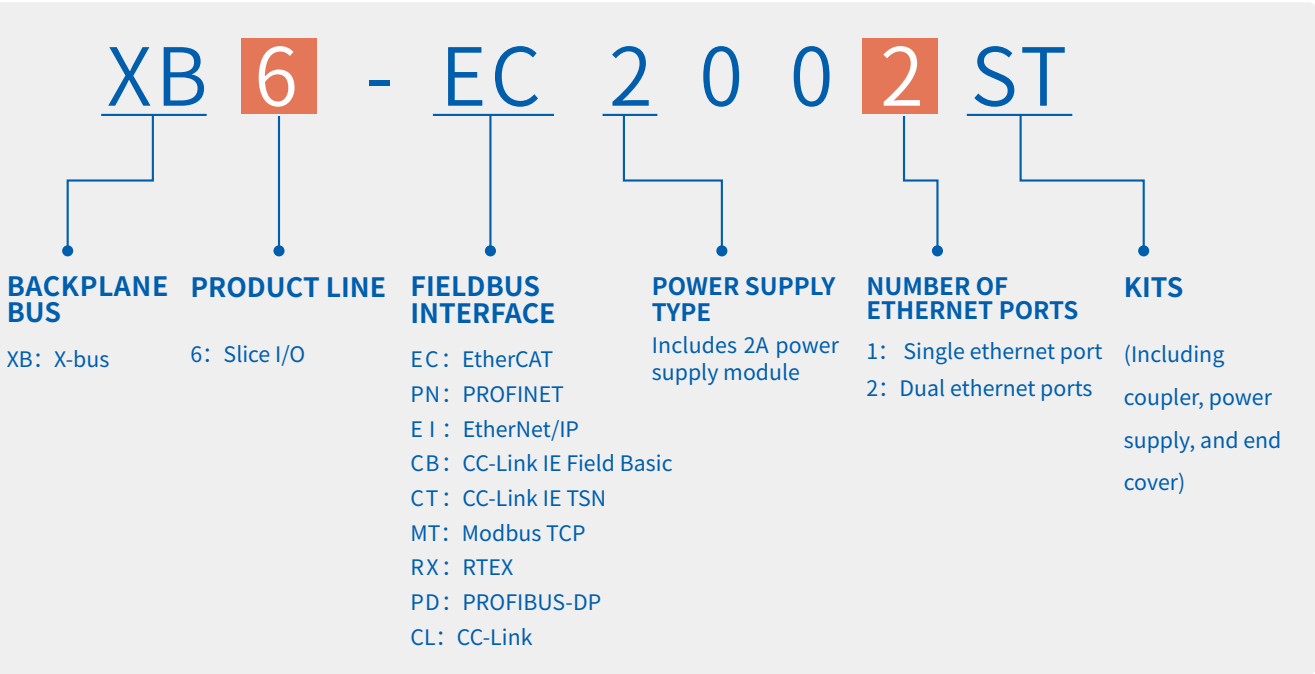
The EtherCAT 4-Port switch has 4*RJ45 network interfaces (1IN3OUT), can be used for interface expansion in the EtherCAT network field and supports various topology types.

> DISASSEMBLY DIAGRAM OF SLICE I/O

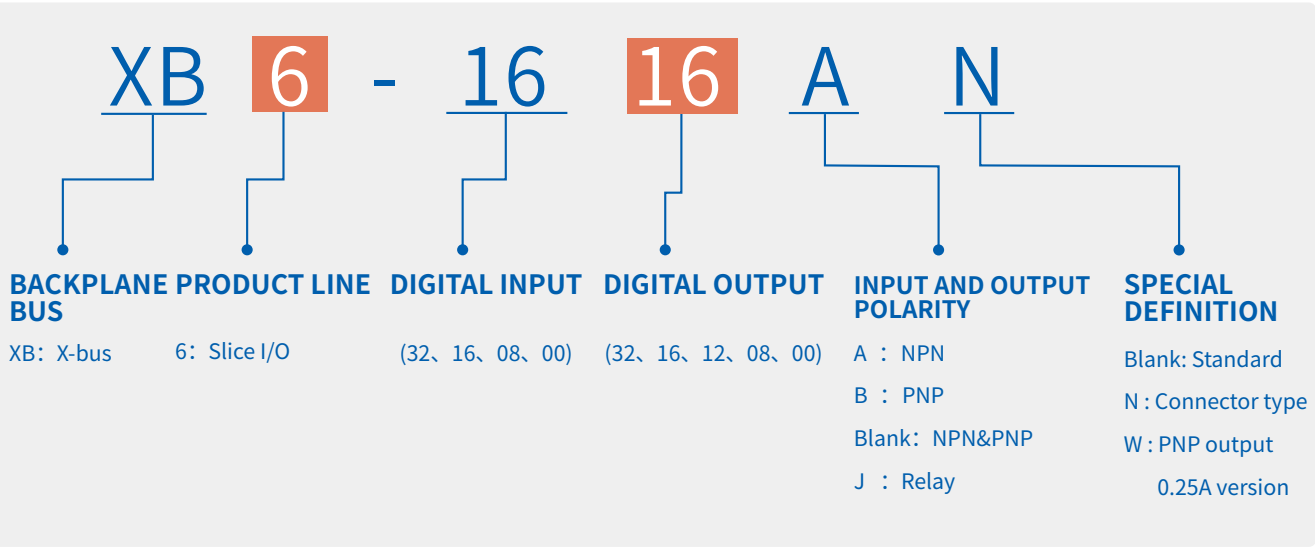


> SLICE I/O NAMING RULE

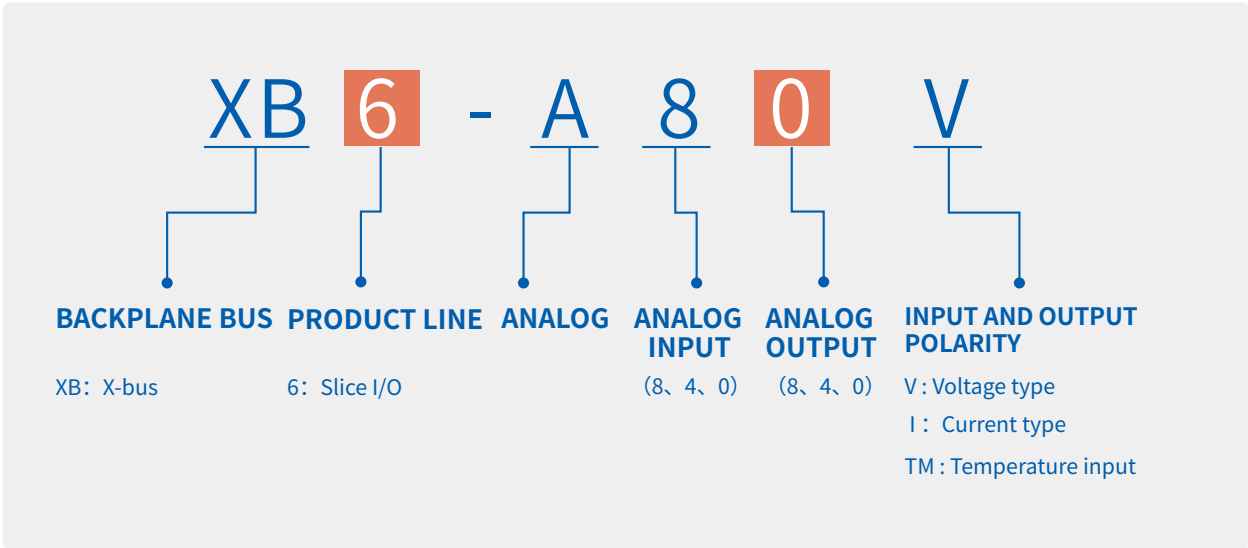
>> COUPLER



>> DIGITAL



>> ANALOG



> SLICE I/O MODELS

DI=digital input, DO= digital output

Coupler		
1	XB6-PN2002ST	PROFINET Coupler kit (with power supply, end cover)
2	XB6-EC2002ST	EtherCAT Coupler kit (with power supply, end cover)
3	XB6-EI2002ST	EtherNet/IP Coupler kit (with power supply, end cover)
4	XB6-CB2002ST	CC-Link IE Field Basic Coupler kit (with power supply, end cover)
5	XB6-CT2002ST	CC-Link IE TSN Coupler kit (with power supply, end cover)
6	XB6-MT2002ST	Modbus TCP Coupler kit (with power supply, end cover)
7	XB6-RX2002ST	RTEK Coupler kit (with power supply, end cover)
8	XB6-PD2002ST	PROFIBUS-DP Coupler kit (with power supply, end cover)
9	XB6-CL2002ST	CC-Link Coupler kit (with power supply, end cover)

Digital		
10	XB6-3200A	32 DI, NPN, European style terminal
11	XB6-0032A	32 DO, NPN, 0.5A, European style terminal
12	XB6-1616A	16 DI 16DO, NPN, 0.5A, European style terminal
13	XB6-3200B	32 DI, PNP, European style terminal
14	XB6-0032B	32 DO, PNP, 0.5A, European style terminal

15	XB6-0032BW	32 DO, PNP, 0.25A,European style terminal
16	XB6-1616B	16 DI, 16DO, PNP, 0.5A, European style terminal
17	XB6-1616BW	16 DI, 6DO, PNP, 0.25A, European style terminal
18	XB6-3200N	32 DI, NPN&PNP, Connector type
19	XB6-0032AN	32 DO, NPN, 0.1A, Connector type
20	XB6-0032BN	32 DO, PNP, 0.1A, Connector type
21	XB6-1600A	16 DI, NPN, European style terminal
22	XB6-0016A	16 DO, NPN, 0.5A, European style terminal
23	XB6-1600B	16 DI, PNP,European style terminal
24	XB6-0016B	16 DO, PNP, 0.5A, European style terminal
25	XB6-0016BW	16 DO, PNP, 0.25A, European style terminal
26	XB6-0800A	8 DI, NPN, European style terminal
27	XB6-0008A	8 DO, NPN, 0.5A, European style terminal
28	XB6-0800B	8 DI, PNP, European style terminal
29	XB6-0008B	8 DO, PNP, 0.5A, European style terminal
30	XB6-0008BW	8 DO, PNP, 0.25A, European style terminal
31	XB6-0012J	12 DO, relay, 2A, European style terminal

Analog input

32	XB6-A80V	U, 8 channels analog voltage input,-10~+10V / 0~+10V, ±0.1% accuracy
33	XB6-A40V	U, 4 channels analog voltage input,-10~+10V / 0~+10V, ±0.1% accuracy
34	XB6-A80I	I, 8 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy
35	XB6-A40I	I, 4 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy
36	XB6-A80TM	8 channels RTD/TC
37	XB6-A40TM	4 channels RTD/TC

Analog output

38	XB6-A08V	U, 8 channels analog voltage output, -10~+10V / 0~+10V, ±0.1% accuracy
39	XB6-A04V	U, 4 channels analog voltage output, -10~+10V / 0~+10V, ±0.1% accuracy
40	XB6-A08I	I, 8 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy
41	XB6-A04I	I, 4 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy

Function Modules

42	XB6-C01SP	1-channel RS485/RS232/RS422 3-in-1 serial communication interface
43	XB6-DS506C	Two-phase hybrid single-axis stepper motor driver, 6A
44	XB6-P04A	4-channel pulse output module, 24V, NPN type, 200kHz
45	XB6-PWM4	4-channel PWM output module, 24V, PNP type, 20kHz
46	XB6-P20A	2-channel incremental encoder counter module, 24V, NPN&PNP type, 1.5MHz
47	XB6-P20D	2-channel incremental encoder counter module, 5V, differential, 500kHz
48	XB6-P20DS	2-channel SSI absolute encoder counter module, 5V, differential, 2MHz
49	XB6-PC80B	8-channel pulse counter module, 24V, PNP type, 600Hz

Other Modules

50	XB6-P2000	Extended Power Module 2A
51	XX6-C18_2	Slice I/O Common terminal expansion module
52	TM40-32AE	32-bit terminal block with lights, NPN
53	TM40-32BE	32-position terminal block with light, PNP
54	TM40-1000-1	Terminal block with matching cable 1m
55	TM40-3000-1	Terminal block with matching cable 3m
56	TM40-5000-1	Terminal block with matching cable 5m
57	TM40-1000-2	Terminal block with matching cable 1m (for PNP input)
58	TM40-3000-2	Terminal block with matching cable 3m (for PNP input)
59	TM40-5000-2	Terminal block with matching cable 5m (for PNP input)

> Motion Control Modules

>> Stepper Driver

- 1 X-Bus backplane bus, support EtherCAT, PROFINET
- 2 Support for two-phase hybrid stepper motors
- 3 Support open/closed loop control
- 4 Support PP, PV, HM three operation modes
- 5 Support acceleration/deceleration and motion merging function

Product Model

XB6-DS506C Two-phase hybrid single-axis stepper motor driver



XB6-DS506C

>> Pulse Output Modules

- 1 X-Bus backplane bus, support EtherCAT, PROFINET, EtherNet/IP, CC-Link IE Field Basic
- 2 4-channel 24V single-ended high-speed pulse output, up to 200kHz
- 3 Support local positive limit, negative limit, home position and brake signal input
- 4 Support PP, PV, HM three operation modes
- 5 Built-in trapezoidal acceleration/deceleration algorithm and multiple zero return modes

Product Model

XB6-P04A 4-channel pulse output module



XB6-P04A

- 1 Based on EtherCAT protocol, supports CiA402 axes
- 2 Distributed clock support
- 3 4-channel 5V differential high-speed pulse output, up to 400kHz
- 4 Support local positive limit, negative limit, home position and brake signal input

Product Model

EC4S-P04D CiA402 4-axis pulse output module



EC4S-P04D

>> PWM Modules

- 1 X-Bus backplane bus, support EtherCAT, PROFINET
- 2 Four-channel PWM output, maximum frequency 20kHz
- 3 Equipped with self-developed acceleration and deceleration algorithm, smooth transition of clock frequency and duty factor
- 4 Support channel level synchronization function, synchronize clock frequency and duty factor with one click
- 5 Up to 1A PWM drive capability

Product Model

XB6-PWM4 4-channel PWM output module



XB6-PWM4

>> Pulse Counter Modules



XB6-P20D

Slice I/O

EC4-P20D

Integrated I/O

XB6-P20A

Slice I/O

XB6-P20DS

Slice I/O

XB6-PC80B

Slice I/O

- 1 Support EtherCAT, PROFINET, EtherNet/IP, CC-Link IE Field Basic and other major protocols
- 2 Support counting requirements of encoders, optical/magnetic scales and various sensors
- 3 Support AB quadrature, directional pulse and double pulse protocols
- 4 Support comparison output and input latching function

>>> Product Models

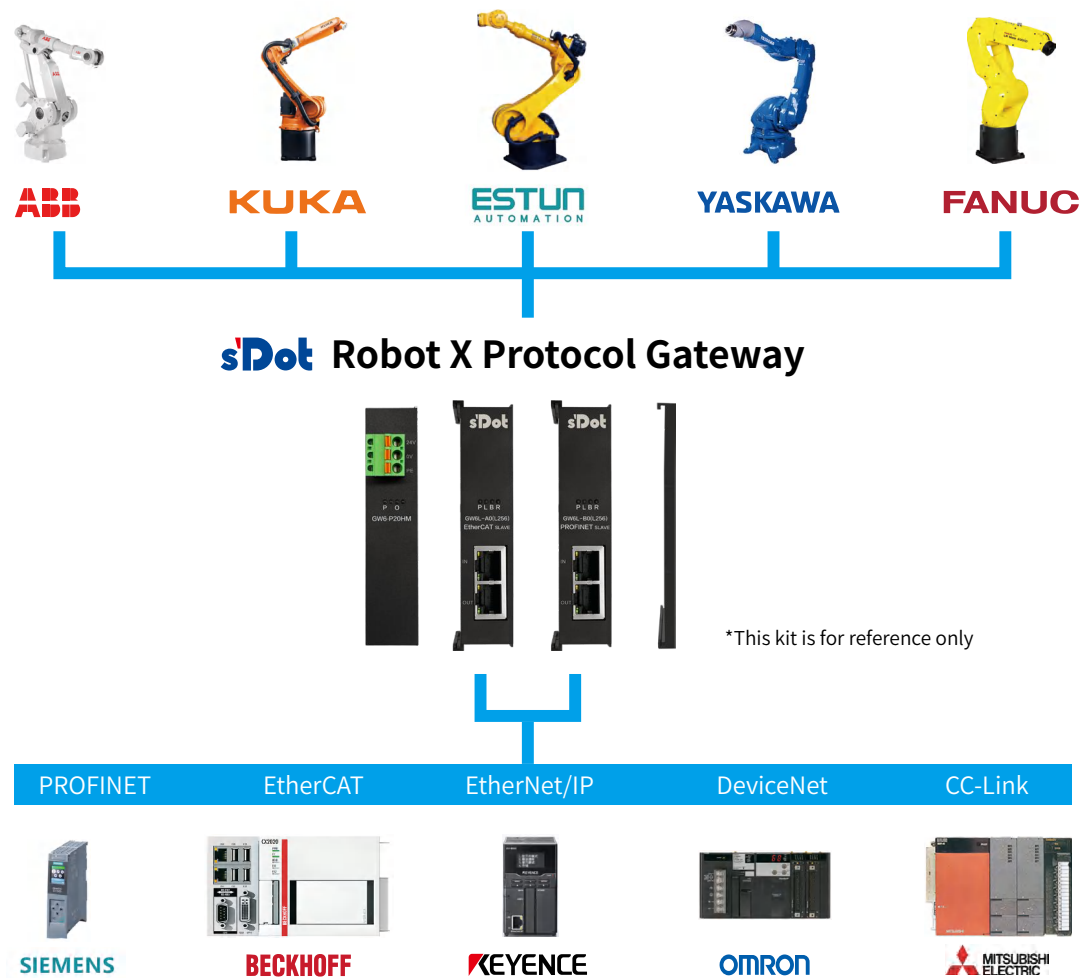
1	XB6-P20D	2-channel incremental encoder counter module, 5V-differential, 500kHz
2	EC4-P20D	2-channel incremental encoder counter module, 5V-differential, 500kHz
3	XB6-P20A	2-channel incremental encoder counter module, 24V-NPN&PNP type, 1.5MHz
4	XB6-P20DS	2-channel SSI absolute encoder counter module, 5V-differential, 2MHz
5	XB6-PC80B	8-channel pulse counter module, 24V-PNP type, 600Hz

Solidot boasts leading product lines in China's motion control field, including multi-protocol stepper driver modules, pulse positioning modules, PWM output modules, encoder counter modules and many other highly competitive products



➤ Protocol Gateway

➤➤ Robot gateway Robot X



➤➤➤ Product Models

1	GW6L-A0A0(L256)	Slice Gateway EtherCAT slave to EtherCAT slave (fixed length 256 bytes)
2	GW6L-A0B0(L256)	Slice Gateway EtherCAT slave to PROFINET slave (fixed length 256 bytes)
3	GW6L-B0B0(L256)	Slice Gateway PROFINET slave to PROFINET slave (fixed length 256 bytes)
4	GW6L-A0C0(L256)	Slice Gateway EtherCAT slave to EtherNet/IP slave (fixed length 256 bytes)
5	GW6L-B0C0(L256)	Slice Gateway PROFINET slave to EtherNet/IP slave (fixed length 256 bytes)
6	GW6L-C0C0(L256)	Slice Gateway EtherNet/IP slave to EtherNet/IP slave (fixed length 256 bytes)
7	GW6L-A0D0(L256)	Slice Gateway EtherCAT slave to CC-Link slave (fixed length 256 bytes)
8	GW6L-B0D0(L256)	Slice Gateway PROFINET slave to CC-Link slave (fixed length 256 bytes)
9	GW6L-C0D0(L256)	Slice Gateway EtherNet/IP slave to CC-Link slave (fixed length 256 bytes)

10	GW6L-A0E0(L256)	Slice Gateway EtherCAT slave to DeviceNet slave (fixed length 256 bytes)
11	GW6L-B0E0(L256)	Slice Gateway PROFINET slave to DeviceNet slave (fixed length 256 bytes)
12	GW6L-C0E0(L256)	Slice Gateway EtherNet/IP slave to DeviceNet slave (fixed length 256 bytes)
14	GW6L-D0E0(L256)	Slice Gateway CC-Link slave to DeviceNet slave (fixed length 256 bytes)
15	GW6L-E0E0(L256)	Slice Gateway DeviceNet slave to DeviceNet slave (fixed length 256 bytes)

➤➤ EtherCAT Switch

- ① 4*RJ45 (1IN/3OUT),support cascade connection of switches
- ② Based on high-performance EtherCAT ASIC communication chip to offer faster speed
- ③ Easy configuration and support most mainstream EtherCAT master stations
- ④ Power supply system supports reverse connection protection and short circuit protection



SW4-ECP04

➤➤ Integrated Serial Interface Gateway

- ① Industrial Ethernet 2-port serial output
- ② Support RS232/RS485/RS422 three interfaces
- ③ MR: Support Modbus RTU Master&Slave
- ④ FP: Free port support, protocol package support, pass-through support



➤➤➤ Product Models

1	PN4-GW2MR	PROFINET to Modbus RTU protocol
2	PN4-GW2FP	PROFINET to Free port protocol
3	EC4-GW2MR	EtherCAT to Modbus RTU protocol
4	EC4-GW2FP	EtherCAT to Free port protocol
5	EI4-GW2MR	EtherNet/IP to Modbus RTU protocol
6	EI4-GW2FP	EtherNet/IP to Free port protocol
7	CB4-GW2MR	CC-Link IE Field Basic to Modbus RTU protocol
8	CB4-GW2FP	CC-Link IE Field Basic to Free port protocol

➤➤ XB6 Series Serial Communication Modules

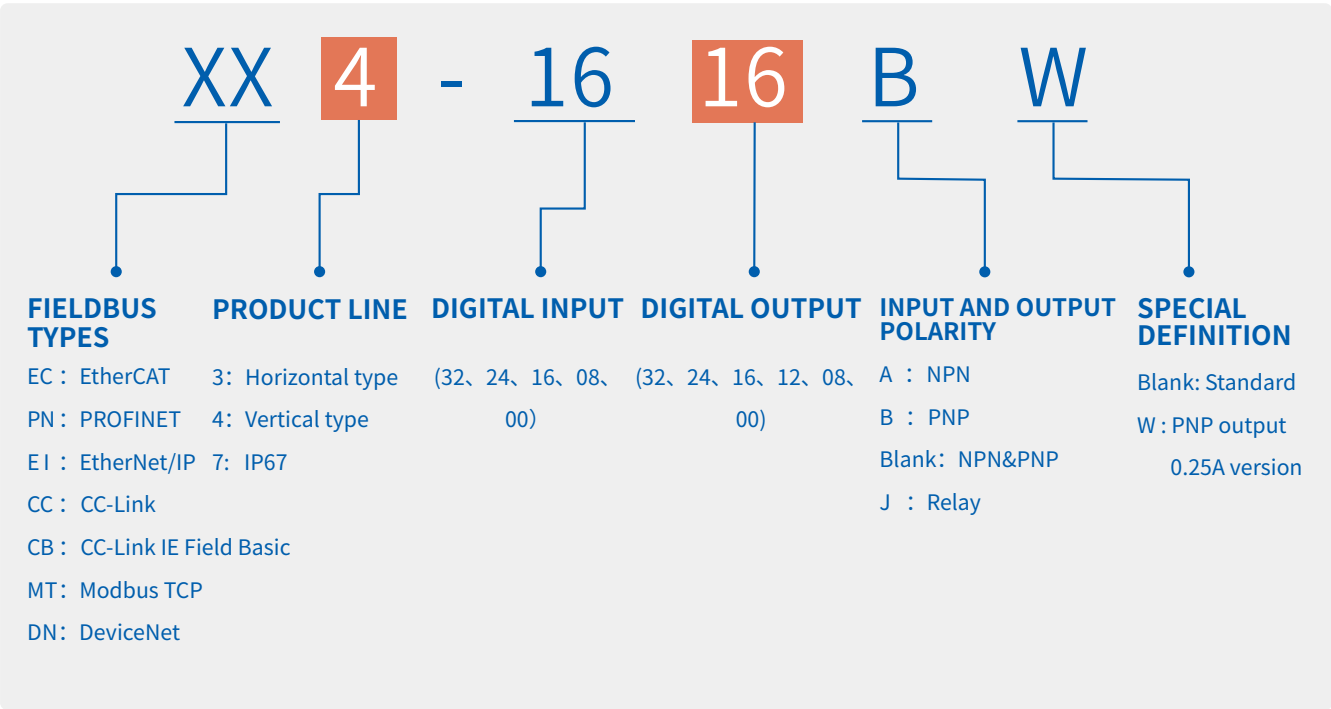
- ① Support RS232/RS485/RS422 three interfaces
- ② Support Modbus RTU/Ascii Master
- ③ Support pass-through & Freeport
- ④ Support for customization of each master function block



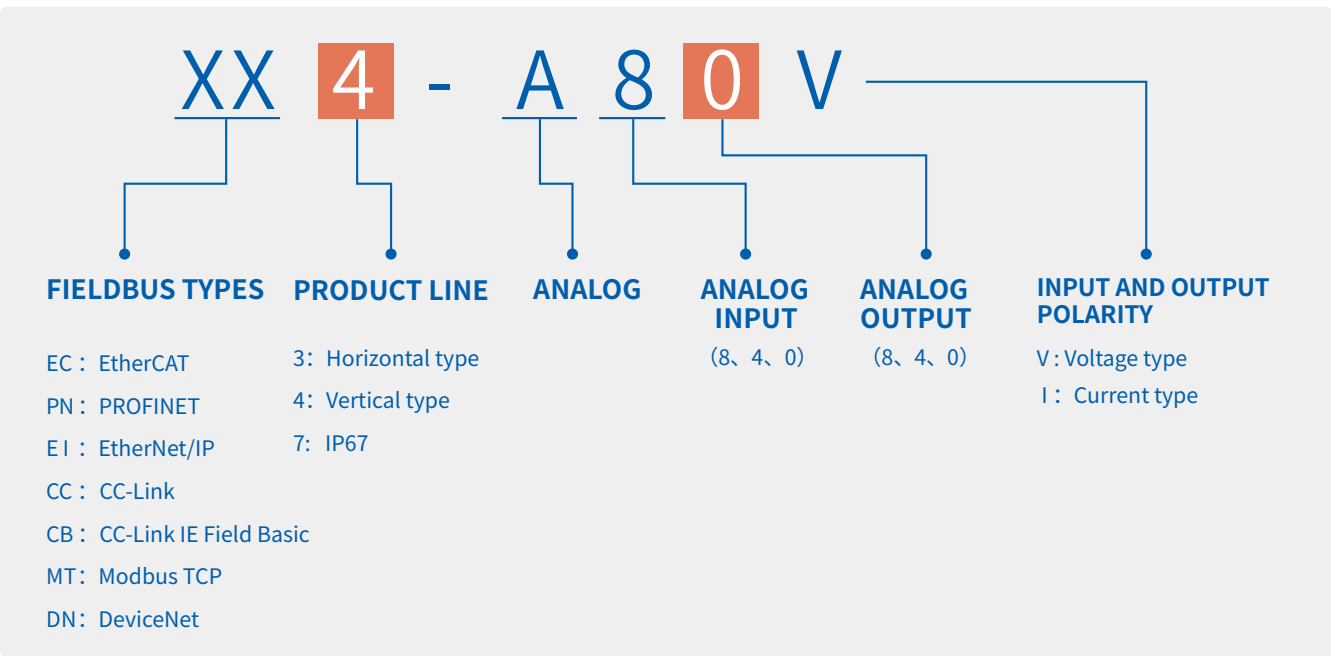
XB6-C01SP

> INTEGRATED I/O NAMING RULE

>> DIGITAL



>> ANALOG



> VERTICAL TYPE I/O

- ① **Small footprint:** 102×72×25mm
- ② **Fast speed:** High-speed ARM + dedicated ASIC
- ③ **High level of integration:**
 - Up to 32 digital channels
 - Up to 8 analog channels



- Easy to maintain:** Terminal blocks are pluggable, easy to inspect issues
- Convenient to expand:** built-in dual Ethernet ports, modules can be cascaded
- Comprehensive modules:** digital, analog, temperature, positioning, and counting modules are covered.
- Easy to install:** 35mm standard DIN rail



VERTICAL TYPE I/O MODELS

EtherCAT

EtherCAT (Ethernet Control Automation Technology) is an open architecture, Ethernet-based fieldbus system with the abbreviation CAT for Control Automation Technology, which was first developed by Beckhoff in Germany.

Solidot EtherCAT-compatible products can perfectly support most of the EtherCAT master products on the market today, including but not limited to the following master products:



DI=digital input, DO= digital output

Single-wire digital I/O		
1	EC4-3200A	EtherCAT, Intergrated I/O, 32DI, NPN
2	EC4-2408A	EtherCAT, Intergrated I/O, 24DI, 8DO, NPN, 0.25A
3	EC4-1616A	EtherCAT, Intergrated I/O, 16DI, 16DO, NPN, 0.25A
4	EC4-0824A	EtherCAT, Intergrated I/O, 8DI, 24DO, NPN, 0.25A
5	EC4-0032A	EtherCAT, Intergrated I/O, 32DO, NPN, 0.25A
6	EC4-1600A	EtherCAT, Intergrated I/O, 16DI, NPN
7	EC4-0808A	EtherCAT, Intergrated I/O, 8DI, 8DO, NPN, 0.25A
8	EC4-0016A	EtherCAT, Intergrated I/O, 16DO, NPN, 0.25A
9	EC4-3200B	EtherCAT, Intergrated I/O, 32DI, PNP

10	EC4-2408B	EtherCAT, Intergrated I/O, 24DI, 8DO, PNP, 0.5A
11	EC4-1616B	EtherCAT, Intergrated I/O, 16DI, 16DO, PNP, 0.5A
12	EC4-1616BW	EtherCAT, Intergrated I/O, 16DI, 16DO, PNP, 0.25A
13	EC4-0824B	EtherCAT, Intergrated I/O, 8DI, 24DO, PNP, 0.5A
14	EC4-0032B	EtherCAT, Intergrated I/O, 32DO, PNP, 0.5A
15	EC4-0032BW	EtherCAT, Intergrated I/O, 32DO, PNP, 0.25A
16	EC4-1600B	EtherCAT, Intergrated I/O, 16DI, PNP
17	EC4-0808B	EtherCAT, Intergrated I/O, 8DI, 8DO, PNP, 0.5A
18	EC4-0808BW	EtherCAT, Intergrated I/O, 8DI, 8DO, PNP, 0.25A
19	EC4-0016B	EtherCAT, Intergrated I/O, 16DO, PNP, 0.5A
20	EC4-0016BW	EtherCAT, Intergrated I/O, 16DO, PNP, 0.25A
21	EC4-0012J	EtherCAT, Intergrated I/O, 12DO, Relay, 2A
22	EC4-1612J	EtherCAT, Intergrated I/O, 16DI, 12DO, Relay, 2A

Analog input		
23	EC4-A40V	EtherCAT, Intergrated I/O, U, 4 channels analog voltage input, -10~+10V / 0~+10V, ±0.1% accuracy
24	EC4-A80V	EtherCAT, Intergrated I/O, U, 8 channels analog voltage input, -10~+10V / 0~+10V, ±0.1% accuracy
25	EC4-A40I	EtherCAT, Intergrated I/O, I, 4 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy
26	EC4-A80I	EtherCAT, Intergrated I/O, I, 8 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy

Analog output		
27	EC4-A04V	EtherCAT, Intergrated I/O, U, 4 channels analog voltage output, -10~+10V / 0~+10V, ±0.1% accuracy
28	EC4-A08V	EtherCAT, Intergrated I/O, U, 8 channels analog voltage output, -10~+10V / 0~+10V, ±0.1% accuracy
29	EC4-A04I	EtherCAT, Intergrated I/O, I, 4 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy
30	EC4-A08I	EtherCAT, Intergrated I/O, I, 8 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy

Function Modules		
31	EC4-P20D	2-channel incremental encoder counter module, 5V-differential, 500kHz
32	EC4S-P04D	CiA402 4-axis pulse output module, 5V-differential, 400kHz

33	XX4-C10_4	Integrated public terminal expansion module, supporting 2-write and 3-write
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>> PROFINET

PROFINET was introduced by PROFIBUS International (PI) and is a new generation of automation bus standard based on industrial Ethernet technology. PROFINET provides a complete network solution for the automation communication field, including current hot topics in the automation field such as real-time Ethernet, motion control, distributed automation, fault safety, and network security. As a cross-vendor technology, it is fully compatible with industrial Ethernet and existing field bus technologies such as PROFIBUS. Solidot has a long history of PROFINET development and our products mainly cover integrated I/O, slice I/O, and valve terminals, which are compatible with Siemens S7-1500, S7-1200, S7-200 SMART, and CNC systems, providing a wide range of applications in many industries.

DI=digital input, DO= digital output

Single-wire digital I/O		
1	PN4-3200A	PROFINET, Intergrated I/O, 32DI, NPN
2	PN4-2408A	PROFINET, Intergrated I/O, 24DI, 8DO, NPN, 0.25A
3	PN4-1616A	PROFINET, Intergrated I/O, 16DI, 16DO, NPN, 0.25A
4	PN4-0824A	PROFINET, Intergrated I/O, 8DI, 24DO, NPN, 0.25A
5	PN4-0032A	PROFINET, Intergrated I/O, 32DO, NPN
6	PN4-1600A	PROFINET, Intergrated I/O, 16DI, NPN
7	PN4-0808A	PROFINET, Intergrated I/O, 8DI, 8DO, NPN, 0.25A
8	PN4-0016A	PROFINET, Intergrated I/O, 16DO, NPN, 0.25A
9	PN4-3200B	PROFINET, Intergrated I/O, 32DI, PNP
10	PN4-2408B	PROFINET, Intergrated I/O, 24DI, 8DO, PNP, 0.5A
11	PN4-1616B	PROFINET, Intergrated I/O, 16DI, 16DO, PNP, 0.5A
12	PN4-1616BW	PROFINET, Intergrated I/O, 16DI, 16DO, PNP, 0.25A
13	PN4-0824B	PROFINET, Intergrated I/O, 8DI, 24DO, PNP, 0.5A
14	PN4-0032B	PROFINET, Intergrated I/O, 32DO, PNP, 0.5A
15	PN4-0032BW	PROFINET, Intergrated I/O, 32DO, PNP, 0.25A
16	PN4-1600B	PROFINET, Intergrated I/O, 16DI, PNP
17	PN4-0808B	PROFINET, Intergrated I/O, 8DI, 8DO, PNP, 0.5A
18	PN4-0808BW	PROFINET, Intergrated I/O, 8DI, 8DO, PNP, 0.25A
19	PN4-0016B	PROFINET, Intergrated I/O, 16DO, PNP, 0.5A
20	PN4-0016BW	PROFINET, Intergrated I/O, 16DO, PNP, 0.25A
21	PN4-0012J	PROFINET, Intergrated I/O, 12DO, Relay, 2A
22	PN4-1612J	PROFINET, Intergrated I/O, 16DI, 12DO, Relay, 2A

Analog input		
23	PN4-A40V	PROFINET, Intergrated I/O, U, 4 channels analog voltage input,support multiple ranges, maximum -10~+10V, $\pm 0.1\%$ accuracy
24	PN4-A80V	PROFINET, Intergrated I/O, U, 8 channels analog voltage input,support multiple ranges, maximum -10~+10V, $\pm 0.1\%$ accuracy
25	PN4-A40I	PROFINET, Intergrated I/O, I, 4 channels analog current input, 0~20mA / 4~20mA, $\pm 0.1\%$ accuracy
26	PN4-A80I	PROFINET, Intergrated I/O, I, 8 channels analog current input, 0~20mA / 4~20mA, $\pm 0.1\%$ accuracy

Analog output		
27	PN4-A04V	PROFINET, Intergrated I/O, U, 4 channels analog voltage output, support multiple ranges, maximum -10~+10V, $\pm 0.1\%$ accuracy
28	PN4-A08V	PROFINET, Intergrated I/O, U, 8 channels analog voltage output, support multiple ranges, maximum -10~+10V, $\pm 0.1\%$ accuracy
29	PN4-A04I	PROFINET, Intergrated I/O, I, 4 channels analog current output, 0~20mA/4-20mA, $\pm 0.1\%$ accuracy
30	PN4-A08I	PROFINET, Intergrated I/O, I, 8 channels analog current output, 0~20mA/4-20mA, $\pm 0.1\%$ accuracy

Function Modules		
31	PN4-GW2MR	PROFINET to 232/485/422 Modbus RTU protocol
32	PN4-GW2FP	PROFINET to 232/485/422 Free Port Protocol

33	XX4-C10_4	Integrated public terminal expansion module, supporting 2-write and 3-write
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>> EtherNet/IP

The abbreviation "IP" in the name stands for "Industrial Protocol", which is an industrial Ethernet communication protocol developed by Rockwell Automation and managed by ODVA (Open DeviceNet Vendors Association). It can be used in program control and other automation applications and is part of the Common Industrial Protocol (CIP). Solidot is one of the earliest companies in China to develop EIP protocol and our products mainly adapt the following master products:



DI=digital input, DO= digital output

Single-wire digital I/O		
1	EI4-3200A	Ethernet/IP, Intergrated I/O, 32DI, NPN
2	EI4-2408A	Ethernet/IP, Intergrated I/O, 24DI, 8DO, NPN, 0.25A
3	EI4-1616A	Ethernet/IP, Intergrated I/O, 16DI, 16DO, NPN, 0.25A
4	EI4-0824A	Ethernet/IP, Intergrated I/O, 8DI, 24DO, NPN, 0.25A
5	EI4-0032A	Ethernet/IP, Intergrated I/O, 32DO, NPN
6	EI4-1600A	Ethernet/IP, Intergrated I/O, 16DI, NPN
7	EI4-0808A	Ethernet/IP, Intergrated I/O, 8DI, 8DO, NPN, 0.25A
8	EI4-0016A	Ethernet/IP, Intergrated I/O, 16DO, NPN, 0.25A
9	EI4-3200B	Ethernet/IP, Intergrated I/O, 32DI, PNP
10	EI4-2408B	Ethernet/IP, Intergrated I/O, 24DI, 8DO, PNP, 0.5A
11	EI4-1616B	Ethernet/IP, Intergrated I/O, 16DI, 16DO, PNP, 0.5A
12	EI4-1616BW	Ethernet/IP, Intergrated I/O, 16DI, 16DO, PNP, 0.25A
13	EI4-0824B	Ethernet/IP, Intergrated I/O, 8DI, 24DO, PNP, 0.5A
14	EI4-0032B	Ethernet/IP, Intergrated I/O, 32DO, PNP, 0.5A
15	EI4-0032BW	Ethernet/IP, Intergrated I/O, 32DO, PNP, 0.25A
16	EI4-1600B	Ethernet/IP, Intergrated I/O, 16DI, PNP
17	EI4-0808B	Ethernet/IP, Intergrated I/O, 8DI, 8DO, PNP, 0.5A
18	EI4-0808BW	Ethernet/IP, Intergrated I/O, 8DI, 8DO, PNP, 0.25A
19	EI4-0016B	Ethernet/IP, Intergrated I/O, 16DO, PNP, 0.5A

20	EI4-0016BW	Ethernet/IP, Intergrated I/O, 16DO, PNP, 0.25A
21	EI4-0012J	Ethernet/IP, Intergrated I/O, 12DO, Relay, 2A
22	EI4-1612J	Ethernet/IP, Intergrated I/O, 16DI, 12DO, Relay, 2A

Analog input		
23	EI4-A40V	Ethernet/IP, Intergrated I/O, U, 4 channels analog voltage input,support multiple ranges, maximum -10~+10V, ±0.1% accuracy
24	EI4-A80V	Ethernet/IP, Intergrated I/O, U, 8 channels analog voltage input,support multiple ranges, maximum -10~+10V, ±0.1% accuracy
25	EI4-A40I	Ethernet/IP, Intergrated I/O, I, 4 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy
26	EI4-A80I	Ethernet/IP, Intergrated I/O, I, 8 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy

Analog output		
27	EI4-A04V	Ethernet/IP, Intergrated I/O, U, 4 channels analog voltage output, support multiple ranges, maximum -10~+10V, ±0.1% accuracy
28	EI4-A08V	Ethernet/IP, Intergrated I/O, U, 8 channels analog voltage output, support multiple ranges, maximum -10~+10V, ±0.1% accuracy
29	EI4-A04I	Ethernet/IP, Intergrated I/O, I, 4 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy
30	EI4-A08I	Ethernet/IP, Intergrated I/O, I, 8 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy

31	XX4-C10_4	Integrated public terminal expansion module, supporting 2-write and 3-write
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>> CC-Link

CC-Link is an open fieldbus with large data capacity and multi-level selectable communication speed, and it is a composite, open and adaptable network system that can be adapted to different ranges from higher management level networks to lower sensor level networks. Led by Mitsubishi, FX5U, L, Q, IQ-R series PLCs are the most common CC-Link master stations. Solidot CC-Link has a long history of development, and the products mainly cover integrated I/O, Slice I/O, and valve terminals.

DI=digital input, DO= digital output

Single-wire digital I/O		
1	CC4-3200AL	CC-Link, Intergrated I/O, 32DI, NPN, input delay ≤ 1.5ms
2	CC4-0032A	CC-Link, Intergrated I/O, 32DO, NPN, 0.5A
3	CC4-1616AL	CC-Link, Intergrated I/O, 16DI, 16DO, NPN, input delay ≤ 1.5ms, 0.5A
4	CC4-1600AL	CC-Link, Intergrated I/O, 16DI, NPN, input delay ≤ 1.5ms
5	CC4-0016A	CC-Link, Intergrated I/O, 16DO, NPN, 0.5A
6	CC4-0808AL	CC-Link, Intergrated I/O, 8DI, 8DO, NPN, input delay ≤ 1.5ms, 0.5A
7	CC4-3200BL	CC-Link, Intergrated I/O, 32DI, PNP, input delay ≤ 1.5ms
8	CC4-0032B	CC-Link, Intergrated I/O, 32 DO, PNP, 0.5A
9	CC4-1616BL	CC-Link, Intergrated I/O, 16DI, 16DO, PNP, input delay ≤ 1.5ms, 0.5A
10	CC4-1600BL	CC-Link, Intergrated I/O, 16DI, PNP, input delay ≤ 1.5ms
11	CC4-0016B	CC-Link, Intergrated I/O, 16 DO, PNP, 0.5A
12	CC4-0808BL	CC-Link, Intergrated I/O, 8DI, 8DO, PNP, input delay ≤ 1.5ms, 0.5A
13	CC4-3200A	CC-Link, Intergrated I/O, 32DI, NPN, input delay ≤ 0.2ms
14	CC4-1600A	CC-Link, Intergrated I/O, 16DI, NPN, input delay ≤ 0.2ms
15	CC4-1616A	CC-Link, Intergrated I/O, 16DI, 16DO, NPN, 0.25A, input delay ≤ 0.2ms, 0.5A
16	CC4-0808A	CC-Link, Intergrated I/O, 8DI, 8DO, NPN, 0.25A, input delay ≤ 0.2ms, 0.5A
17	CC4-3200B	CC-Link, Intergrated I/O, 32 DI, PNP, input delay ≤ 0.2ms
18	CC4-1600B	CC-Link, Intergrated I/O, 16 DI, PNP, input delay ≤ 0.2ms
19	CC4-1616B	CC-Link, Intergrated I/O, 16DI, 16DO, PNP, input delay ≤ 0.2ms, 0.5A
20	CC4-0808B	CC-Link, Intergrated I/O, 8DI, 8DO, PNP, input delay ≤ 0.2ms, 0.5A

Analog input		
21	CC4-A40V	CC-Link, Intergrated I/O, U, 4 channels analog voltage input,-10~+10V / 0~+5V / 1~+5V, ±0.1% accuracy
22	CC4-A80V	CC-Link, Intergrated I/O, U, 8 channels analog voltage input,-10~+10V / 0~+5V / 1~+5V, ±0.1% accuracy
23	CC4-A40I	CC-Link, Intergrated I/O, I, 4 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy
24	CC4-A80I	CC-Link, Intergrated I/O, I, 8 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy

Analog output		
25	CC4-A04V	CC-Link, Intergrated I/O, U, 4 channels analog voltage output, -10~+10V / 0~+5V / 1~+5V, ±0.1% accuracy
26	CC4-A08V	CC-Link, Intergrated I/O, U, 8 channels analog voltage output, -10~+10V / 0~+5V / 1~+5V, ±0.1% accuracy
27	CC4-A04I	CC-Link, Intergrated I/O, I, 4 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy
28	CC4-A08I	CC-Link, Intergrated I/O, I, 8 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy

29	XX4-C10_4	Integrated public terminal expansion module, supporting 2-write and 3-write
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>> CC-Link IE Field Basic

CC-Link IE Field Basic is a new member of the CC-Link IE protocol and is a bus network based on the standard 100Mbps Ethernet, specifically designed to provide a low-cost control network for small-scale systems that do not require high-speed control. Solidot has been a long-term partner of CLPA and has developed CC-Link and CC-Link IE compatible products. CC-Link IE Field Basic products can be used with Mitsubishi FX5U, L, Q, IQ-R PLCs.

DI=digital input, DO= digital output

Single-wire digital I/O		
1	CB4-3200A	CC-Link IE Field Basic, Integrated I/O, 32DI, NPN
2	CB4-2408A	CC-Link IE Field Basic, Integrated I/O, 24DI, 8DO, NPN, 0.25A
3	CB4-1616A	CC-Link IE Field Basic, Integrated I/O, 16DI, 16DO, NPN, 0.25A
4	CB4-0824A	CC-Link IE Field Basic, Integrated I/O, 8DI, 24DO, NPN, 0.25A
5	CB4-0032A	CC-Link IE Field Basic, Integrated I/O, 32DO, NPN, 0.25A
6	CB4-1600A	CC-Link IE Field Basic, Integrated I/O, 16DI, NPN
7	CB4-0808A	CC-Link IE Field Basic, Integrated I/O, 8DI, 8DO, NPN, 0.25A
8	CB4-0016A	CC-Link IE Field Basic, Integrated I/O, 16DO, NPN, 0.25A
9	CB4-0012J	CC-Link IE Field Basic, Integrated I/O, 12DO, Relay, 2A
10	CB4-1612J	CC-Link IE Field Basic, Integrated I/O, 16DI, 12DO, Relay, 2A

Analog input		
11	CB4-A40V	CC-Link IE Field Basic, Integrated I/O, U, 4 channels analog voltage input, -10~+10V / 0~+10V, ±0.1% accuracy
12	CB4-A80V	CC-Link IE Field Basic, Integrated I/O, U, 8 channels analog voltage input, -10~+10V / 0~+10V, ±0.1% accuracy
13	CB4-A40I	CC-Link IE Field Basic, Integrated I/O, I, 4 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy
14	CB4-A80I	CC-Link IE Field Basic, Integrated I/O, I, 8 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy

Analog output		
15	CB4-A04V	CC-Link IE Field Basic, Integrated I/O, U, 4 channels analog voltage output, -10~+10V / 0~+10V, ±0.1% accuracy
16	CB4-A08V	CC-Link IE Field Basic, Integrated I/O, U, 8 channels analog voltage output, -10~+10V / 0~+10V, ±0.1% accuracy
17	CB4-A04I	CC-Link IE Field Basic, Integrated I/O, I, 4 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy
18	CB4-A08I	CC-Link IE Field Basic, Integrated I/O, I, channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy

>> DeviceNet

DeviceNet is a field bus standard for automation technology developed by Allen-Bradley in 1994. DeviceNet uses controller area network (CAN) as its underlying communication protocol, and has defined profiles for different devices at its application layer. Its main applications include information exchange, safety equipment, and large control systems. It has a high market share in the United States. Solidot DeviceNet products include integrated I/O, which is used with Omron CJ series PLC and ABB robots.

DI=digital input, DO= digital output

Single-wire digital I/O		
1	DN4-3200A	DeviceNet, Integrated I/O, 32DI, NPN
2	DN4-1616A	DeviceNet, Integrated I/O, 16DI, 16DO, NPN, 0.25A,
3	DN4-0032A	DeviceNet, Integrated I/O, 32DO, NPN, 0.25A
4	DN4-1600A	DeviceNet, Integrated I/O, 16DI, NPN
5	DN4-0808A	DeviceNet, Integrated I/O, 8DI, 8DO, NPN, 0.25A
6	DN4-0016A	DeviceNet, Integrated I/O, 16DO, NPN, 0.25A
7	DN4-1616BW	DeviceNet, Integrated I/O, 16DI, 16DO, PNP, 0.25A

8	XX4-C10_4	Integrated public terminal expansion module
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>> Modbus TCP

Modbus is a serial communication protocol published by Modicon (now Schneider Electric) in 1979 for communication with programmable logic controllers (PLCs). Modbus has become a de facto standard communication protocol in the industrial field and is now a common way to connect industrial electronic devices. There are versions of the Modbus protocol for serial ports, Ethernet, and other networks supporting Internet protocols. Solidot Modbus TCP products have built-in Ethernet switches for easier wiring. They are usually used with PLCs from Labview, Siemens, Beckhoff, and Schneider Electric.

DI=digital input, DO= digital output

Single-wire digital I/O		
1	MT4-3200A	Modbus TCP, Integrated I/O, 32DI, NPN
2	MT4-1616A	Modbus TCP, Integrated I/O, 16DI, 16DO, NPN, 0.25A
3	MT4-0032A	Modbus TCP, Integrated I/O, 32DO, NPN, 0.25A
4	MT4-1600A	Modbus TCP, Integrated I/O, 16DI, NPN
5	MT4-0808A	Modbus TCP, Integrated I/O, 8DI, 8DO, NPN, 0.25A
6	MT4-0016A	Modbus TCP, Integrated I/O, 16DO, NPN, 0.25A
7	MT4-1616B	Modbus TCP, Integrated I/O, 16DI, 16DO, PNP, 0.5A
8	MT4-1616BW	Modbus TCP, Integrated I/O, 16DI, 16DO, PNP, 0.25A
Analog input		
9	MT4-A40V	Modbus TCP, Integrated I/O, U, 4 channels analog voltage input,support multiple ranges, maximum -10~+10V, ±0.1% accuracy
10	MT4-A80V	Modbus TCP, Integrated I/O, U, 8 channels analog voltage input,support multiple ranges, maximum -10~+10VV, ±0.1% accuracy
11	MT4-A40I	Modbus TCP, Integrated I/O, I, 4 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy
12	MT4-A80I	Modbus TCP, Integrated I/O, I, 8 channels analog current input, 0~20mA / 4~20mA, ±0.1% accuracy

Analog output		
13	MT4-A04V	Modbus TCP, Integrated I/O, U, 4 channes analog voltage output, support multiple ranges, maximum -10~+10V, ±0.1% accuracy
14	MT4-A08V	Modbus TCP, Integrated I/O, I, 8 channels analog voltage output, support multiple ranges, maximum -10~+10V, ±0.1% accuracy
15	MT4-A04I	Modbus TCP, Integrated I/O, I, 4 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy
16	MT4-A08I	Modbus TCP, Integrated I/O, I, 8 channels analog current output, 0~20mA/4-20mA, ±0.1% accuracy
17	XX4-C10_4	Integrated public terminal expansion module, supporting 2-write and 3-write

> HORIZONTAL TYPE I/O

- 1 Digital input signals are compatible with NPN & PNP
- 2 The height is only 35mm
- 3 The innovative channel indicator design is adopted as the indicators are placed close to the channels, channel status is displayed intuitively and clearly, facilitating detection and maintenance.



100 Mbps industrial Ethernet port. Simple configuration and support for major controllers. DIN 35 mm standard rail mounting, using screw-fixed wiring terminal, stable and fast wiring.



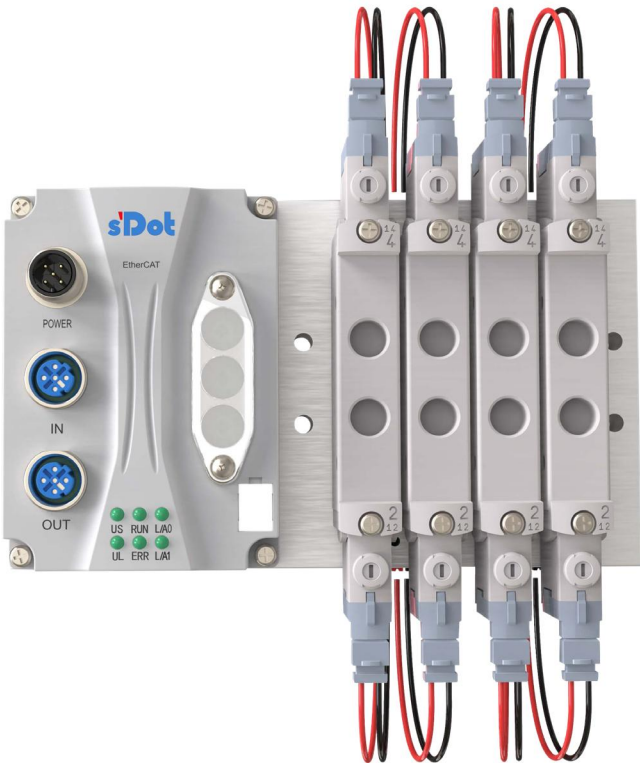
> HORIZONTAL TYPE I/O MODELS

DI=digital input, DO= digital output

Single-wire digital I/O		
1	EI3-3200	Ethernet/IP, Integrated I/O, 32DI, NPN & PNP compatible, Screw terminal
2	EI3-1616A	Ethernet/IP, Integrated I/O, 16DI, 16DO, NPN, 0.5A, Screw terminal
3	EI3-1616B	Ethernet/IP, Integrated I/O, 16DI, 16DO, PNP, 0.5A, Screw terminal
4	EI3-0032A	Ethernet/IP, Integrated I/O, 32DO, NPN, 0.5A, Screw terminal
5	EI3-0032B	Ethernet/IP, Integrated I/O, 32DO, PNP, 0.5A, Screw terminal
6	PN3-3200	PROFINET, Integrated I/O, 32DI, NPN & PNP compatible, Screw terminal
7	PN3-1616A	PROFINET, Integrated I/O, 16DI, 16DO, NPN, 0.5A, Screw terminal
8	PN3-1616B	PROFINET, Integrated I/O, 16DI, 16DO, PNP, 0.5A, Screw terminal
9	PN3-0032A	PROFINET, Integrated I/O, 32DO, NPN, 0.5A, Screw terminal
10	PN3-0032B	PROFINET, Integrated I/O, 32DO, PNP, 0.5A, Screw terminal
11	EC3-3200	EtherCAT, Integrated I/O, 32DI, NPN & PNP compatible, Screw terminal
12	EC3-1616A	EtherCAT, Integrated I/O, 16DI, 16DO, NPN, 0.5A, Screw terminal
13	EC3-1616B	EtherCAT, Integrated I/O, 16DI, 16DO, PNP, 0.5A, Screw terminal
14	EC3-0032A	EtherCAT, Integrated I/O, 32DO, NPN, 0.5A, Screw terminal
15	EC3-0032B	EtherCAT, Integrated I/O, 32DO, PNP, 0.5A, Screw terminal
16	CC3-3200	CC-Link, Integrated I/O, 32DI, NPN & PNP compatible, Screw terminal
17	CC3-1616A	CC-Link, Integrated I/O, 16DI, 16DO, NPN, 0.5A, Screw terminal
18	CC3-1616B	CC-Link, Integrated I/O, 16DI, 16DO, PNP, 0.5A, Screw terminal
19	CC3-0032A	CC-Link, Integrated I/O, 32DO, NPN, 0.5A, Screw terminal
20	CC3-0032B	CC-Link, Integrated I/O, 32DO, PNP, 0.5A, Screw terminal
21	CB3-3200	CC-Link IE Field Basic, Integrated I/O, 32DI, NPN & PNP compatible, Screw terminal
22	CB3-1616A	CC-Link IE Field Basic, Integrated I/O, 16DI, 16DO, NPN, 0.5A, Screw terminal
23	CB3-1616B	CC-Link IE Field Basic, Integrated I/O, 16DI, 16DO, PNP, 0.5A, Screw terminal
24	CB3-0032A	CC-Link IE Field Basic, Integrated I/O, 32DO, NPN, 0.5A, Screw terminal
25	CB3-0032B	CC-Link IE Field Basic, Integrated I/O, 32DO, PNP, 0.5A, Screw terminal

> VALVE TERMINAL

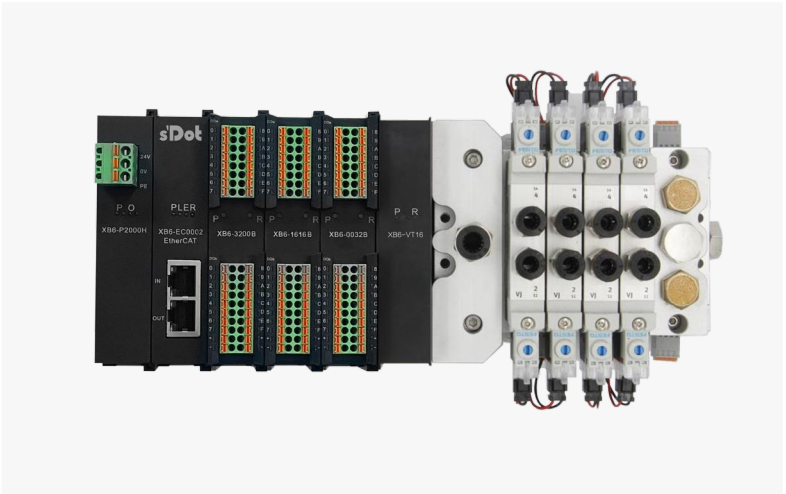
- 1 Support multiple bus protocols
- 2 Save wiring, only one communication cable is needed
- 3 Support short-circuit / open-circuit diagnostics
- 4 Support single channel clear/hold function
- 5 Output channel counting function
- 6 Support up to 24 double solenoid valves



Solidot valve terminal is China’s first self-developed valve terminal and has strong universality. Products can be customized according to the numbers and models of solenoid valve based on customer demands. It supports protocols like PROFINET、EtherCAT、EtherNet/IP、CC-Link IE Field Basic, ect. The conventional bus plate is adopted to freely extend input and output modules, achieving closed-loop control of the solenoid valve. The customized manifold base is designed with aluminum alloy, increasing the aesthetic of the product.



> SLICE VALVE TERMINAL MODELS



Slice Valve Terminal

Features.
It can be used in conjunction with Solidot XB6 series slice I/O mixing. The structure is more compact and the application is more flexible.

XB6 - (VUVG-L14) - 16 - G - N



Code ① : Fieldbus protocol

Code	Protocol
XB6	X-bus

Code ②: Solenoid valve models (rated voltage DC24V, and the wire lead-out method is selected as the wire-out type). If single or double solenoid valves exist at the same time, only single solenoid valve will be filled in. This valve terminal is adapted to the following series of solenoid valves.

Brands	Series	Brands	Series
FESTO	VUVG -L10/LK10	AirTAC	4V100M
	VUVG -L14/LK14		4V200M
SMC	SY3 □ 20		7V0500M
	SY5 □ 20		7V100M
	SY7 □ 20		7V200M
		CKD	4GD1
			4GD2

Installation size similar to the above solenoid valves can also be customized

Code ③: Valve positions, ranges from 04-16 (both single and double solenoid valve supports up to 16 valve positions).

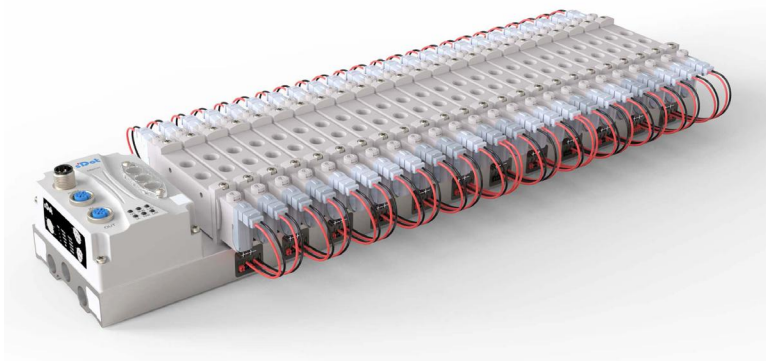
Code ④: Inlet and outlet threads of the manifold (the default type is the same as the type of solenoid valve teeth)

Code	G	R	N	M
Thread	G Thread	RC Thread	NPT Thread	Metric thread

Code ⑤: Provide gaskets and screws for solenoid valve installation (By default, the customer provides their own solenoid valve)

Customer's own	Need our company to provide
Y	N

> INTEGRATED VALVE TERMINAL MODELS



C2S

Features:
Support multiple protocols, compatible with mainstream solenoid valves in the market, easy wiring, support up to 24 double solenoid valves or 48 single solenoid valves.

C2S - EC - 24 B - F01

① ② ③ ④

Code ①: Fieldbus protocol

Codes	EC	PN	EI	CB	CL	CO	DN	OO
Protocol	EtherCAT	PROFINET	EtherNet/IP	CC-Link IEFB	CC-Link	CANopen	DeviceNet	D-Sub

Code ②: Valve positions

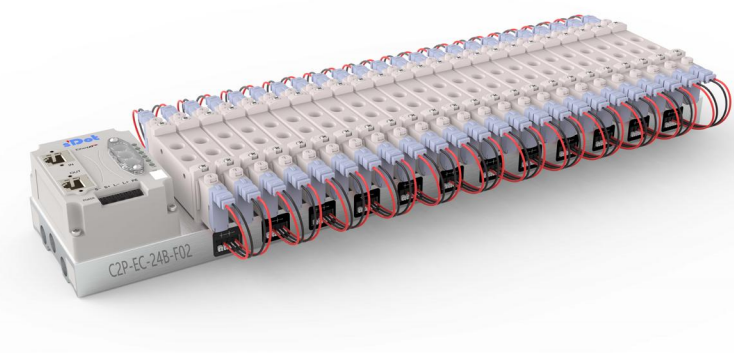
04	08	12	16	20	24
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Code ③: Single / double solenoid valves

A (Single solenoid valve, WIP)
B (Double solenoid valve, compatible with single solenoid valve)

Code ④: Compatible solenoid valve models (Rated voltage DC24V)

Brands	serial number	Series		Brands	serial number	Series	
FESTO	F01	VUVG-LK10	VUVG-L10	AirTAC	A01	4V1	
	F02	VUVG-LK14	VUVG-L14		A02	4V2	
SMC	S01	SY3			A04	7V0	
	S02	SY5			A05	7V1	
	S03	SY7			A06	7V2	
CKD	C01	4GD1	4RD1		A07	5V1	
	C02	4GD2	4RD2		A08	5V2	
	C03	4GD3	4RD3				



C2P

Features:
Supports a variety of protocols, can be compatible with mainstream solenoid valves on the market, uses RJ45 interfaces, easy to wire and use.

C2P - EC - 24 B - F01

① ② ③ ④

Code ①: Fieldbus protocol

Codes	EC	PN	EI	CB
Protocol	EtherCAT	PROFINET	EtherNet/IP	CC-Link IE Field Basic

Code ②: Valve positions

04	08	12	16	20	24
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Code ③: Single / double solenoid valves

A (Single solenoid valve, WIP)
B (Double solenoid valve, compatible with single solenoid valve)

Code ④: Compatible solenoid valve models (Rated voltage DC24V)

Brands	serial number	Series		Brands	serial number	Series	
FESTO	F01	VUVG-LK10	VUVG-L10	AirTAC	A01	4V1	
	F02	VUVG-LK14	VUVG-L14		A02	4V2	
SMC	S01	SY3			A04	7V0	
	S02	SY5			A05	7V1	
	S03	SY7			A06	7V2	
CKD	C01	4GD1	4RD1		A07	5V1	
	C02	4GD2	4RD2		A08	5V2	
	C03	4GD3	4RD3				

> IP67 FIELDBUS I/O

- 1 The shell is made of PBT+GF30% reinforced plastic material, with excellent mechanical properties and good electrical insulation
- 2 Power supply interface adopts M12-L code, maximum over-current 16A
- 3 Wide range of I/O types, covering various signal types
- 4 Universal I/O and bus interfaces, no custom cables required, high compatibility
- 5 Diverse channel indicator design is adopted to display channel status intuitively and clearly
- 6 A firmware upgrade interface is reserved, making product upgrades more convenient



Solidot IP67 I/O modules support various bus protocols. The size of the product is 225*62*35mm. The shell is made of PTB+GF30% reinforced plastic material with excellent mechanical performance. The fully sealed design is suitable for harsh working conditions. A wide range of signal types provide diverse options for field applications.

EtherCAT

PROFINET

CC-Link

> IP67 FIELDBUS I/O MODELS

DI=digital input, DO= digital output

Single-wire digital I/O		
1	EC7-1600A	EtherCAT, Integrated I/O, 16DI, NPN
2	EC7-1600B	EtherCAT, Integrated I/O, 16DI, PNP
3	EC7-0016A	EtherCAT, Integrated I/O, 16DO, NPN
4	EC7-0016B	EtherCAT, Integrated I/O, 16DO, PNP
5	EC7-0808A	EtherCAT, Integrated I/O, 8DI, 8DO, NPN, 0.5A
6	EC7-0808B	EtherCAT, Integrated I/O, 8DI, 8DO, PNP, 0.5A
7	CC7-1600A	CC-Link, Integrated I/O, 16DI, NPN
8	CC7-1600B	CC-Link, Integrated I/O, 16DI, PNP
9	CC7-0016A	CC-Link, Integrated I/O, 16DO, NPN, 0.5A
10	CC7-0016B	CC-Link, Integrated I/O, 16DO, PNP, 0.5A
11	CC7-0808A	CC-Link, Integrated I/O, 8DI, 8DO, NPN, 0.5A
12	CC7-0808B	CC-Link, Integrated I/O, 8DI, 8DO, PNP, 0.5A
13	PN7-1600A	PROFINET, Integrated I/O, 16DI, NPN
14	PN7-1600B	PROFINET, Integrated I/O, 16DI, PNP
15	PN7-0016A	PROFINET, Integrated I/O, 16DO, NPN, 0.5A
16	PN7-0016B	PROFINET, Integrated I/O, 16DO, PNP, 0.5A
17	PN7-0808A	PROFINET, Integrated I/O, 8DI, 8DO, NPN, 0.5A
18	PN7-0808B	PROFINET, Integrated I/O, 8DI, 8DO, PNP, 0.5A

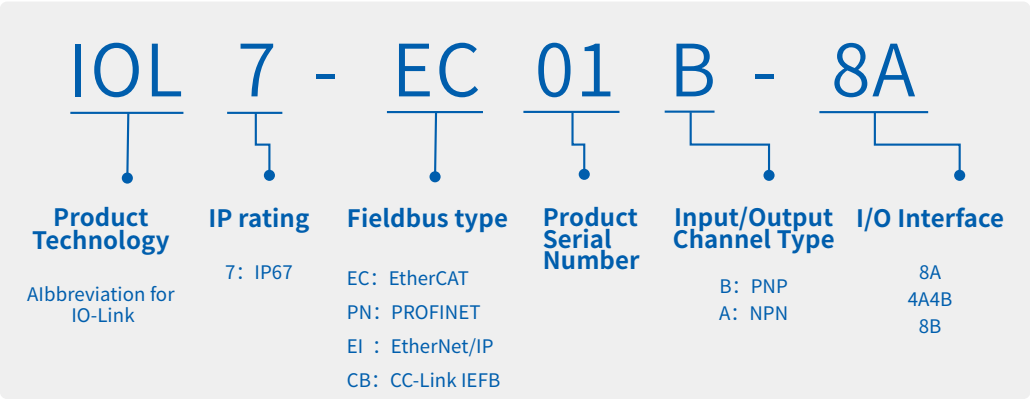
> IO-Link

>> IO-Link Master

- 1 Up to IP67 protection
- 2 Designed with standard IO-Link v1.1
- 3 Support a variety of I/O types and fieldbus protocols
- 4 Class-A or Class-B are available for interface type
- 5 Connection of various IO-Link standard slaves and standard switch signals
- 6 LED indicators display channel-level protection and diagnostics



>>> NAMING RULE



>>> MODELS

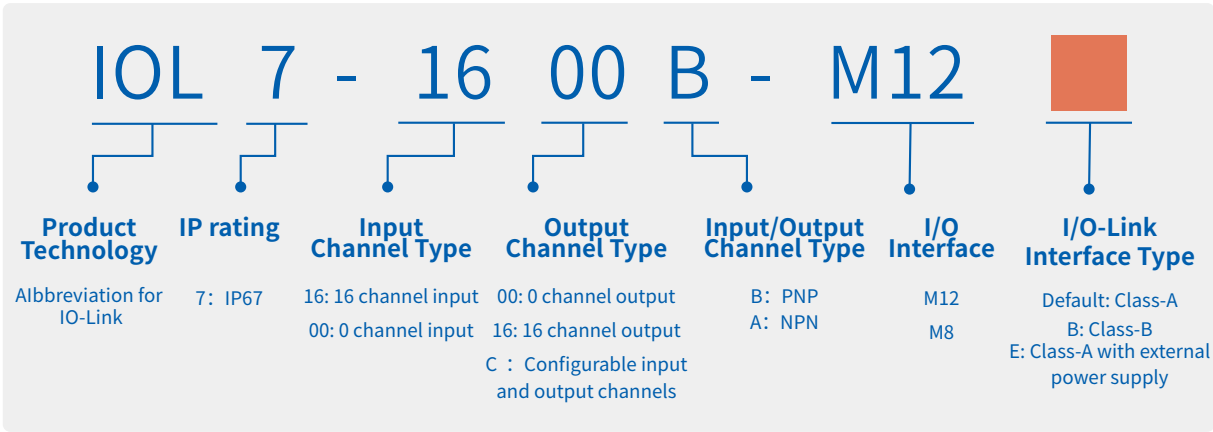
Single-wire digital I/O		
1	IOL7-EC01B-8A	EtherCAT 8xClass-A Port IO-Link Master
2	IOL7-EC01B-4A4B	EtherCAT 4xClass-A Port, 4xClass-B Port IO-Link Master
3	IOL7-EC01B-8B	EtherCAT 8xClass-B Port, IO-Link Master
4	IOL7-PN01B-8A	PROFINET 8xClass-A Port IO-Link Master
5	IOL7-PN01B-4A4B	PROFINET 4xClass-A Port, 4xClass-B Port IO-Link Master
6	IOL7-PN01B-8B	PROFINET 8xClass-B Port IO-Link Master
7	IOL7-EI01B-8A	EtherNet/IP 8xClass-A Port IO-Link Master
8	IOL7-EI01B-4A4B	EtherNet/IP 4xClass-A Port, 4xClass-B Port IO-Link Master
9	IOL7-EI01B-8B	EtherNet/IP 8xClass-B Port IO-Link Master

>> IO-Link Hub

- 1 Up to IP67 protection
- 2 Easy and fast wiring for both power and data transmission
- 3 Designed with standard IO-Link v1.1
- 4 Connection of various IO-Link standard masters
- 5 LED indicators display channel-level protection and diagnostics



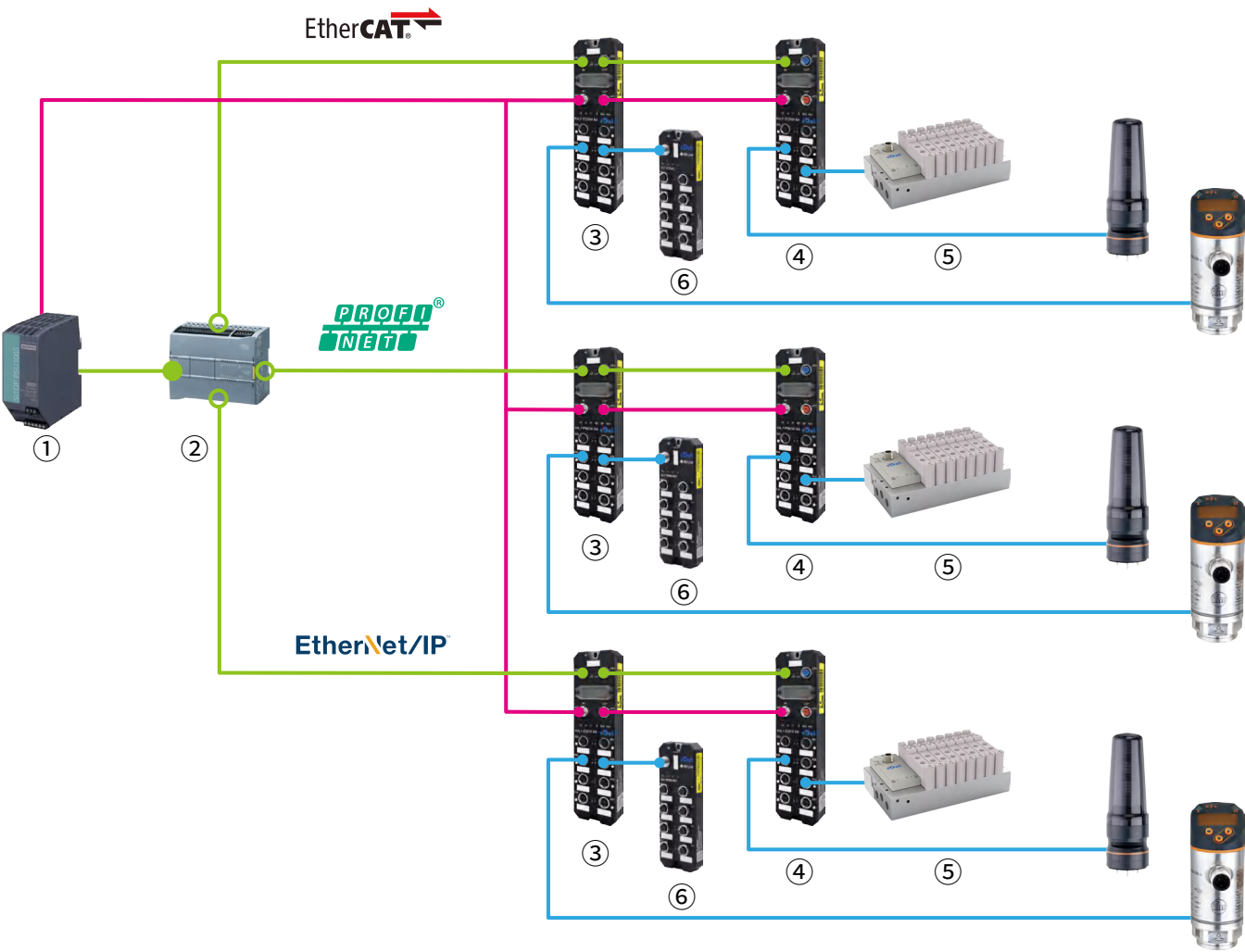
>>> NAMING RULE



>>> MODELS

Single-wire digital I/O		
1	IOL7-1600B-M12	16 Channels Digital Input IO-Link Hub, PNP
2	IOL7-0016B-M12	16 Channels Digital Output IO-Link Hub, PNP
3	IOL7-16CB-M12	IO-Link Hub that can be configured with a maximum of 16 channels for input or output, PNP

> IO-Link System Overview



No.	Description
①	Power supply
②	PLC
③	PROFINET、EtherCAT、EtherNet/IP protocol IO-Link 8A master
④	PROFINET、EtherCAT、EtherNet/IP protocol IO-Link 4A4B master
⑤	IO-Link Valve Terminal
⑥	DI、DO、DI/DO IO-Link slave
⑦	IO-Link Sensor, Actuator, etc.

1 Power module parameters

Parameter Name	Technical Specification
Rated supply voltage	24V DC (18V...36V)
Output current	2A
Protection measures	polarity protection, short-circuit protection
External connection method	Spring-type terminal
Physical dimensions	XB6-P2000H: 106×61×22.5 mm XB6-P2000: 106×73×25.7mm
Weight	About 110g
Mounting method	DIN 35mm rail
Altitude	Below 2000m (Reference sea level operating altitude)
IP rating	IP20
Operating environment	Avoid dust, oil mist and corrosive gases
Operating temperature	-10 ~ +60℃
Operating humidity	95 %RH
Storage temperature	-20℃ ~+75℃
Storage humidity	<95%, Non-condensing

2 Network interface parameters

Bus protocol	EtherCAT	EtherNet/IP	PROFINET	Modbus TCP	CC-Link IE Field Basic	CC-Link					DeviceNet		
Number of Slave Stations	Depends on the number of slaves supported by the master					Remote I/O stations: up to 64 stations Remote device stations: up to 42 stations					Maximum 64 stations		
Data transmission medium	Ethernet/EtherCAT CAT5 cable					CC-Link dedicated cable (3-core shielded stranded wire)					DeviceNet-specific cables		
Transmission rate	100Mb/s					10Mbps / 5Mbps / 2.5Mbps / 625kbps / 156kbps					500kbps / 250kbps / 156kbps		
Transmission distance	≤ 100m (station-to-station distance)					10 Mbps	5 Mbps	2.5 Mbps	625 kbps	156 kbps	500 kbps	250 kbps	156 kbps
						≤ 100m	≤ 160m	≤ 400m	≤ 900m	≤ 1200m	≤ 100m	≤ 250m	≤ 500m
Bus Interface	XX7 series: 2xM12-D,4pin XX3, XX4, XX6 series: 2×RJ45					XX3 series: bullet type terminal , 4P XX4 series: bullet type terminal , 7P XX7 series: 2xM12-D,4pin					Spring-loaded terminal block, 7P		
Configuration mode	Configure on the master station software												
Rated supply voltage	24V DC (18V...36V)												
Power consumption	XX3 series: max. 3.0W, 125mA			XX4 series: max. 3.0W, 125mA		XX6 series: max. 2.7W, 540mA			XX7 series: max. 1.2W, 50mA				
Power contacts	IP20: Max 24V DC/10A					IP67: Max 24V DC/16A							
Power supply protection measures	polarity protection, short-cricuit protection												
Physical dimensions	XX3 series: 100×96×32mm			XX4 series: 102×72×25mm		XX6 series: 106×61×22.5mm			XX7 series: 225×62×35mm				
Weight	XX3 series: about 170g			XX4 series: about 140g		XX6 series: about 80g							
Mounting method	DIN 35mm rail												
Altitude	Below 2000m (Reference sea level operating altitude)												
IP rating	XX3、XX4、XX6 series: IP20					XX7 series: IP67							
Operating environment	Avoid dust, oil mist and corrosive gases												
Operating temperature	IP20: -10 ~ +60°C					IP67: -25~70° C							
Operating humidity	95 %RH												
Storage temperature	-20°C ~+75°C												
Storage humidity	<95%, Non-condensing												

3 Digital input parameters

Parameter Name	Technical Specification	
Number of channels	32 channels / 16 channels / 8 channels	
Signal Type	NPN (sink)/ PNP (source)	
Rated supply voltage	24V DC (18V...36V)	
Input filtering	Default 3ms (1ms, 2ms, 3ms can be set)	
ON Voltage/ON Current	NPN: 9V/2.7mA PNP: 15V/2.8mA	
OFF Voltage/OFF Current	NPN: 11V/2.3mA PNP: 5V/0.9mA	
Input Response Time	ON → OFF	≤ 73us
	OFF → ON	≤ 8us
Input Impedance	5.57kΩ	
Isolation withstand voltage	500V AC	
Isolation method	Optocoupler isolation	
I/O external connection method	IP20: pop-up terminal block, MIL connector, screw type terminal IP67: M12-A, 5pin	
Common terminal method	8 points / 16 points, maximum current 8A per common terminal (depending on the specific model)	
Channel protection	Optocoupler	
Physical dimensions	XX3 series: 100×96×32mm	XX4 series: 102×72×25mm
	XX6 series: 106×73×25.7mm	XX7 series: 225×62×35mm
Weight	XX3 series: about 170g	XX4 series: about 140g XX6 series: about 110g
Mounting method	DIN 35mm rail	
Altitude	Below 2000m (Reference sea level operating altitude)	
IP rating	XX3、XX4、XX6 series: IP20	XX7 series: IP67
Operating environment	Avoid dust, oil mist and corrosive gases	
Operating temperature	IP20: -10 ~ +60°C	IP67: -25~70° C
Operating humidity	95 %RH	
Storage temperature	-20°C ~+75°C	
Storage humidity	<95%, Non-condensing	

4 Transistor output parameters

Parameter Name	Technical Specifications		
Number of channels	32 channels / 16 channels / 8 channels		
Signal Type	NPN (sink)/ PNP (source)		
Rated supply voltage	24V DC (18V...36V)		
Single-channel load current	A type、 BW type: Max.0.25A B type: Max.0.5A		
OFF-state leakage current	A type:4uA BW type:6uA B type:6uA		
Residual Voltage	A type:0.4V BW type:0.2V B type:0.2V		
Output response time	ON → OFF	≤ 191us	
	OFF → ON	≤ 40us	
Isolation method	Optocoupler isolation		
Isolation withstand voltage	500V DC		
Load Type	Resistive load, inductive load, lamp load		
I/O external connection method	IP20: pop-up terminal block, MIL connector, screw type terminal IP67: M12-A, 5pin		
Common terminal method	8 points / 16 points a common terminal, each common terminal maximum current 2A/4A/8A (depending on the specific model)		
Channel protection	Overcurrent, short-circuit protection		
Physical dimensions	XX3 series: 100×96×32mm XX4 series: 102×72×25mm XX6 series: 106×73×25.7mm XX7 series: 225×62×35mm		
Weight	XX3 series: about 170g	XX4 series: about 140g	XX6 series: about 110g
Mounting method	DIN 35mm rail		
Altitude	Below 2000m (Reference sea level operating altitude)		
IP rating	XX3、XX4、XX6 series: IP20 XX7 series: P67		
Operating environment	Avoid dust, oil mist and corrosive gases		
Operating temperature	95 %RH		
Storage temperature	-20°C ~+75°C		
Storage humidity	<95%, Non-condensing		

5 Relay output parameters

Parameter Name	Technical Specifications		
Number of channels	12 channels		
Rated supply voltage	24V DC (18V...36V)		
Rated switch voltage	24V DC		
Rated switching current	2A/1 point; 8A/1 common terminal		
Output response time	ON → OFF	≤ 10ms	
	OFF → ON	≤ 5ms	
Max. switching frequency	50HZ		
Relay life	More than two million times		
Isolation withstand voltage	500V AC		
Maximum Surge Voltage	6kV		
Load Type	Resistive load, lamp load, inductive load		
I/O external connection method	XX4、XX6 series: Slug type terminal		
Common terminal method	8 point 1 public end		
Physical dimensions	XX4 series: 102×72×25mm	XX6 series: 106×73×25.7mm	
Weight	XX4 series: about 140g	XX6 series: about 110g	
Mounting method	DIN 35mm rail		
Altitude	Below 2000m (Reference sea level operating altitude)		
IP rating	XX4、XX6 series: IP20		
Operating environment	Avoid dust, oil mist and corrosive gases		
Operating temperature	-10 ~ +60℃		
Operating humidity	95 %RH		
Storage temperature	-20℃ ~+75℃		
Storage humidity	<95%, Non-condensing		

6 Analog input parameters

Parameter Name		Technical Specifications
Number of channels		8 channels / 4 channels
Rated supply voltage		24V DC (18V....36V)
Input method		Single-ended
Range	Voltage type	-10 V ~ +10 V, 0V~10V
	Current type	0~20 mA, 4~20mA
Maximum limit value	Voltage type	-10 V ~ +10 V, 0V~10V
	Current type	0~20 mA, 4~20mA
Resolution		16bit
Sampling frequency		≤ 1 ksps
Accuracy		±0.1%
Input Filtering		Default 10 times (configuration range 1 - 200 times)
Conversion Time		800us/8 channels, 400us/4 channels
Input Impedance	Voltage type	400kΩ
	Current type	100Ω
Isolation withstand voltage		500V AC
Channel Protection		Over-voltage protection
I/O external connection method		Spring-type terminal
Physical dimensions		XX4 series: 102×72×25mm XX6 series: 106×73×25.7mm
Weight		XX4 series: about 140g XX6 series: about 110g
Mounting method		DIN 35mm rail
Altitude		Below 2000m (Reference sea level operating altitude)
IP rating		IP20
Operating environment		Avoid dust, oil mist and corrosive gas
Operating temperature		-10 ~ +60°C
Operating humidity		95 %RH
Storage temperature		-20°C ~+75°C
Storage humidity		<95%, Non-condensing

7 Analog output parameters

Parameter Name		Technical Specifications
Number of channels		8 channels / 4 channels
Rated supply voltage		24V DC (18V...36V)
Range	Voltage type	-10 V ~ +10 V, 0V~10V
	Current type	0~20 mA, 4~20mA
Resolution		16bit
Accuracy		±0.1%
Load Impedance		≥ 2 kΩ
Isolation withstand voltage		500V AC
Channel Protection		Short-circuit protection
I/O external connection method		Spring-type terminal
Physical dimensions		XX4 series: 102×72×25mm XX6 series: 106×73×25.7mm
Weight		XX4 series: about 140g XX6 series: about 110g
Mounting method		DIN 35mm rail
Altitude		Below 2000m (Reference sea level operating altitude)
IP rating		XX4、XX6 series: IP20
Operating environment		Avoid dust, oil mist and corrosive gases
Operating temperature		-10 ~ +60°C
Operating humidity		95 %RH
Storage temperature		-20°C ~+75°C
Storage humidity		<95%, Non-condensing

8 Temperature acquisition module parameters

Parameter Name	Technical Specifications		
Number of channels	8 channels / 4 channels		
Rated supply voltage	24V DC (18V...36V)		
Sensor type	Thermocouple (TC)	RTD (Thermal Resistance Device)	Resistance (TD)
Wiring method	2-wire system	2-wire system/3-wire system	2-wire system
Range	K: -200~1370°C J: -200~1200°C E: -200~1000°C S: -50~1690°C B: 50~1800°C	Pt100: — 200~850°C Pt200: — 200~600°C Pt500: — 200~600°C Pt1000: — 200~600°C	15Ω~3kΩ
Accuracy	±0.5%	±1°C	±0.1%
Sensitivity	0.1°C		±0.1 Ω
Resolution	16 bit (int type)		
Conversion time (single channel)	201 ms	26 ms	
Cycle time (all channels)	(Single channel refresh time + disconnection detection time) * number of channels		
Input filtering	Single-channel filter, configurable (number of smoothing stages 1 to 10)		
Break detection	Support	Not supported	
Break detection time	2ms	/	
Maximum allowed input voltage per channel	30V		
Electrical isolation	500Vrms, no isolation between channels		
I/O external connection method	Spring-type terminal		
Physical dimensions	106×73×25.7mm		
Weight	Approx. 110g		
Mounting method	DIN 35mm rail		
Altitude	Up to 2000m (Reference sea level operating altitude)		
IP rating	IP20		
Operating environment	Avoid dust, oil mist and corrosive gas		
Operating temperature	-10 ~ +60° C		
Operating humidity	95 %RH		
Storage temperature	-20°C ~ +75°C		
Storage humidity	<95%, non-condensing		

9 Pulse input module parameters

Parameter Name	Technical Specifications	
Number of channels	2 channels	
Rated supply voltage	24V DC (18V.... 36V)	
Encoder type	Incremental encoder, Orthogonal	
Encoder power supply	5V DC	
Type of Acquisition signal	Differential signal	
Signal type	RS422	
Process data volume	Upstream	20Byte
	Downstream	12Byte
Counting rate	<=500KHZ	
Z-phase zeroing	Support	
Hardware latch	Configurable latch signal	
Comparison output	Not supported	
Calculate magnification setting	4x/2x/1x (default 4x)	
Resolution setting	0-65535(default 0)	
Circular counting	(0-resolution *count multiplier count multiplier -1)	
Linear counting	0-4294967295	
Counting initial value setting	Support	
Hardware filtering	0-15 (default 7)	
Counting range selection	0-4294967295	
Reverse Counting	Support	
I/O external connection method	Spring-type terminal	
Input signal	Signal Type	NPN (sink) & PNP (source) compatibl
	Number of Channels	1 pulse channel / 2 points
	ON Voltage/ON Current	NPN: 9V/2.7mA PNP: 15V/2.8mA
	OFF Voltage/OFF Current	NPN: 11V/2.3mA PNP: 5V/0.9mA

Output signal	Signal Type	PNP (source)
	Number of Channels	1 pulse channel / 2 points
	Single channel load current	Max.0.5A
	Load Type	Ohmic load, inductive load, lamp load
I/O external connection method	Spring-type terminal	
Physical dimensions	XX4 series: 102×72×25mm XX6 series: 106×73×25.7mm	
Weight	XX4 series: about 140g XX6 series: about 110g	
Mounting method	DIN 35mm rail	
Altitude	Below 2000m (Reference sea level operating altitude)	
IP rating	IP20	
Operatin environment	Avoid dust, oil mist and corrosive gases	
Operating temperature	-10 ~ +60°C	
Operating humidity	95 %RH	
Storage temperature	-20°C ~+75°C	
Storage humidity	<95%, Non-condensing	

10 Pulse output module parameters

Parameter Name	Technical Specifications	
Number of axes	4	
Rated power supply voltage	24V DC (18V...36V)	
Drive signal	differential signal	
Output specification		
Signal voltage		
Operating mode	Pulse + direction	
Output frequency	≤ 400KHz	
Synchronous cycle	≥ 1ms	
Input signal	Signal type	NPN(sink)
	Number of channels	1 pulse channel / 2 points
	ON voltage / ON current	NPN: Less than DC13.94V / more than 1.910mA
	OFF voltage / OFF current	NPN: More than DC13.90V / less than 1.905mA
	Input response frequency	4.233700254022Hz
	Input response time	ON → OFF: 212ms
		OFF → ON: 24.2ms
	Common terminal method	
	Input impedance	7.36kΩ
	Channel protection	
I/O external connection method	spring-type terminal	
Exterior dimensions	XX4 series: 102×72×25mm XX6 series: 106×73×25.7mm	
Weight	XX4 series: about 140g XX6 series: about 110g	
Mounting method	DIN 35mm rail	
Altitude	Below 2000 meters (referring to operating altitude relative to sea level)	
IP rating	XX4、XX6 series: IP20	
Operatin environment	Avoid dust, oil mist and corrosive gases	
Operating temperature	-10 ~ +60°C	
Operating humidity	95 %RH	
Storage temperature	-20°C ~+75°C	
Storage humidity	< 95%, non-condensing	
EMI characteristics	Conforms to the EN IEC61000-6-4-2019 standard	
EMS characteristics	Conforms to the EN IEC61000-6-2-2019 standard	
Shock resistance	Conforms to the EN 60068-2-6 standard	
Impact resistance	Conforms to the EN 60068-2-27/29 standard	

11 Stepper driver module parameters

Parameter Name	Technical Specifications	
Number of axes	Single-axis	
Adaptable motor	Two-phase hybrid stepper motor	
Driver power supply	Max. flange 86mm	
Output current	DC 24V or 48V	
Drive method	4A~6.0A/phase (peak)	
Device initialization time	Full-bridge bipolar PWM drive	
Input signal	2-channel high-speed input signal 100us	Optocoupler isolated, input voltage: H = 3.5 - 26V , L = 0 - 0.8V ON current 5 - 8mA
	3-channel general-purpose input signal 1ms	Optocoupler isolated, input voltage: H = 24V , L = 0 - 0.8V ON current 3~6mA
Output signal	2-channel general-purpose output signal	Opto-isolated output, maximum withstand voltage 30VDC, maximum saturation current 500mA
	1-channel brake output	Opto-isolated output, maximum withstand voltage 30VDC, maximum saturation current 500mA
I/O external connection method	Spring-type terminal	
Physical dimensions	106×73×25.7mm	
Weight	Approx. 110g	
Mounting method	DIN 35mm rail	
Altitude	Below 2000m (Reference sea level operating altitude)	
IP rating	IP20	
Operating environment	Avoid dust, oil mist and corrosive gas	
Operating temperature	-10 ~ +55° C	
Operating humidity	< 85 % RH, Non-condensing	
Storage temperature	-20° C ~ +75° C	
Storage humidity	< 95%, Non-condensing	
Heat dissipation	Installed in a ventilated environment When the current setting is greater than 3A or ambient temperature ≥ 45° C, forced air cooling is required	

12 IO-Link master parameters

Parameter Name	Technical Specifications
Operating voltag (V)	24VDC(18V~30V)
US total current	Maximum 16A
UA total current	Maximum 16A
IO-Link interface	M12, A-code, 4Pin, Pin end
Number of IO-Link channels	8
Type of IO-Link interfac	Class-A/Class-B
Version of IO-link	V1.1
Power interface	M12, L-code, 5Pin, Pin end/Hole end
Number of input channels	Maximum 16 points
Number of output channels	Maximum 8 points
Signal type	NPN/PNP
Mounting method	Screw fixation
Altitude	Below 2000m (Reference sea level operating altitude)
IP rating	IP67
Perating temperature	-25~+70°C
Storage temperature	-40~+85°C
Relative humidity	95%, Non-condensing

13 IO-Link hub parameters

Parameter Name		Technical Specifications
Operating voltage (V)		24VDC(18V~30V)
Current loss (mA)		Idle condition: 15mA
IO-Link interface		M12, A-code, 4Pin, Pin end
Type of IO-Link interface		Class-A
Version of IO-link		V1.1
Communication speed		COM2(38.4kbps)
Minimum cycle time		3.2ms
nput/output interface		M12, A-code, 5Pin, Hole end
Input signal	Signal type	PNP
	Number of channels	Maximum 16 channels
	Output signal	4mA
Output signal	Signal type	PNP
	Number of channels	Maximum 16 channels
	Maximum current for single-channel output	0.5A
	Total output current	Maximum 4mA
Diagnostic Support		Supply Pressure Monitoring;Temperature Monitoring;Short Circuit and Overload Protection
Protective Measures		Short Circuit Protection; Overload Protection
Dimensions		164.7 ◇ 57.7 ◇ 34.1 mm
Mounting Method		Screw Fixing
Altitude		Below 2000m (operating altitude relative to sea level)
IP rating		IP67
Operating Temperature		-25~+70℃
Storage Temperature		-40~+85℃
Relative Humidity		95%, non-condensing

> Pre-injection connector

Pre-injected connector, also known as pre-cast cable, is an essential part of an IP67 bus I/O system.The material and construction characteristics allow it to be used in a variety of industrial environments such as wet and oily environments and also meet IP67 protection requirements.We also offer several options of jacket and functional connectors for different applications.



>> PVC Cable

This series of cables is made of PVC jacketing and is suitable for most field environments, offering mechanical properties (including tensile strength, crack stress and abrasion resistance) and excellent weather resistance (weather, low temperature and oil resistance). It is the standard solution for connection systems.

Jacketing type	Conductor cross-sectional area	wire diameter	Matching interfaces	Cable certification
PVC (Green)	4 × 0.34mm²(22AWG)	6.0±0.30mm	M12 D-code	UL、CE、RoHS
PVC (Black)	5 × 1.50mm²(16AWG)	8.8±0.30mm	M12 L-code	
PVC (Black)	5 × 0.34mm²(22AWG)	5.4±0.20mm	M12 A-code	
PVC (Red)	3 × 0.60mm²(20AWG)	7.8±0.30mm	M12 A-code	

>> PUR Cable

The PUR jacketing material allows the cables to be used in a wide range of field environments and offers excellent mechanical properties (including tensile strength, cracking stress and abrasion resistance) and excellent weather resistance (weather, low temperature and oil resistance), making them particularly suitable for use in harsh environments such as oily and cold temperatures. In addition, all cables in this range are shielded to provide better immunity to interference.

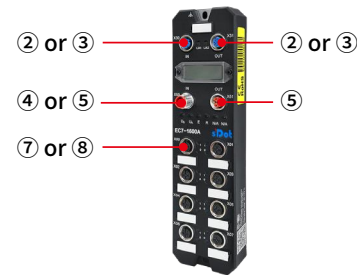
Jacketing type	Conductor specification	wire diameter	Matching interfaces	Cable certification
PUR (Green)	4 × 0.34mm²(22AWG)	6.0±0.30mm	M12 D-code	UL、CE、RoHS
PUR (Black)	5 × 2.50mm²(14AWG)	10.50±0.40mm	M12 L-code	
PUR (Black)	5 × 0.34mm²(22AWG)	5.8±0.20mm	M12 A-code	

>> Accessories

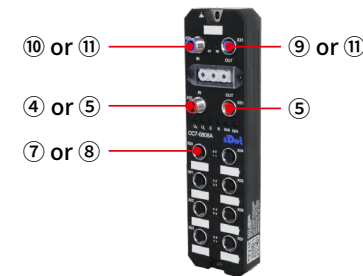
IP20 Fieldbus I/O



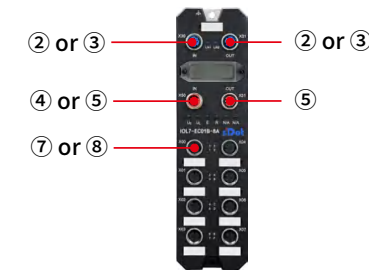
IP67 Fieldbus I/O



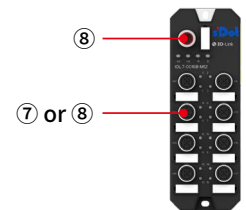
IP67 Fieldbus I/O (CC-Link)





IO-Link Master



IO-Link Hub





Category	Model	Description
 ① Communication Cable	R/R-0.5RS	RJ45/RJ45, 0.5m, green with shielded, PUR
	R/R-1.0RS	RJ45/RJ45, 1m, green with shielded, PUR
	R/R-2.0RS	RJ45/RJ45, 2m, green with shielded, PUR
	R/R-3.0RS	RJ45/RJ45, 3m, green with shielded, PUR
	R/R-5.0RS	RJ45/RJ45, 5m, green with shielded, PUR
	R/R-10.0RS	RJ45/RJ45, 10m, green with shielded, PUR
	R/R-20.0RS	RJ45/RJ45, 20m, green with shielded, PUR


 ② Communication Cable	AZG/R-0.5RS	M12 straight/RJ45, D-Code, Male 4-pin, 0.5m, green with shielded, PUR
	AZG/R-1.0RS	M12 straight/RJ45, D-Code, Male 4-pin, 1m, green with shielded, PUR
	AZG/R-2.0RS	M12 straight/RJ45, D-Code, Male 4-pin, 2m, green with shielded, PUR
	AZG/R-3.0RS	M12 straight/RJ45, D-Code, Male 4-pin, 3m, green with shielded, PUR
	AZG/R-5.0RS	M12 straight/RJ45, D-Code, Male 4-pin, 5m, green with shielded, PUR
	AZG/R-10.0RS	M12 straight/RJ45, D-Code, Male 4-pin, 10m, green with shielded, PUR
	AZG/R-20.0RS	M12 straight/RJ45, D-Code, Male 4-pin, 20m, green with shielded, PUR

 ③ Communication Cable	AZG/AZG-0.5RS	M12 straight/M12 straight, D-Code, Male 4-pin, 0.5m, green with shielded, PUR
	AZG/AZG-1.0RS	M12 straight/M12 straight, D-Code, Male 4-pin, 1m, green with shielded, PUR
	AZG/AZG-2.0RS	M12 straight/M12 straight, D-Code, Male 4-pin, 2m, green with shielded, PUR
	AZG/AZG-3.0RS	M12 straight/M12 straight, D-Code, Male 4-pin, 3m, green with shielded, PUR
	AZG/AZG-5.0RS	M12 straight/M12 straight, D-Code, Male 4-pin, 5m, green with shielded, PUR
	AZG/AZG-10.0RS	M12 straight/M12 straight, D-Code, Male 4-pin, 10m, green with shielded, PUR
	AZG/AZG-20.0RS	M12 straight/M12 straight, D-Code, Male 4-pin, 20m, green with shielded, PUR

 ④ Module Power Cable	BZM/S-0.5RS	M12 straight/loose wires, L-Code, Female 5-pin, 0.5m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR, loose wires exposed25mm, core wire exposed10mm
	BZM/S-1.0RS	M12 straight/loose wires, L-Code, Female 5-pin, 1m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR, loose wires exposed25mm, core wire exposed10mm
	BZM/S-2.0RS	M12 straight/loose wires, L-Code, Female 5-pin, 2m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR, loose wires exposed25mm, core wire exposed10mm
	BZM/S-3.0RS	M12 straight/loose wires, L-Code, Female 5-pin, 3m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR, loose wires exposed25mm, core wire exposed10mm
	BZM/S-5.0RS	M12 straight/loose wires, L-Code, Female 5-pin, 5m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR, loose wires exposed25mm, core wire exposed10mm
	BZM/S-10.0RS	M12 straight/loose wires, L-Code, Female 5-pin, 10m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR, loose wires exposed25mm, core wire exposed10mm
	BZM/S-20.0RS	M12 straight/loose wires, L-Code, Female 5-pin, 20m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR, loose wires exposed25mm, core wire exposed10mm

Category	Model	Description
 ⑤ Module Power Cable	BZG/BZM-0.5RS	M12 straight/M12 straight, L-Code, Male 5-pin,/Female 5-pin, 0.5m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR
	BZG/BZM-1.0RS	M12 straight/M12 straight, L-Code, Male 5-pin,/Female 5-pin, 1m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR
	BZG/BZM-2.0RS	M12 straight/M12 straight, L-Code, Male 5-pin,/Female 5-pin, 2m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR
	BZG/BZM-3.0RS	M12 straight/M12 straight, L-Code, Male 5-pin,/Female 5-pin, 3m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR
	BZG/BZM-5.0RS	M12 straight/M12 straight, L-Code, Male 5-pin,/Female 5-pin, 5m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR
	BZG/BZM-10.0RS	M12 straight/M12 straight, L-Code, Male 5-pin,/Female 5-pin, 10m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR
	BZG/BZM-20.0RS	M12 straight/M12 straight, L-Code, Male 5-pin,/Female 5-pin, 20m, black with shielded, wire diameter5*2.5mm ² , MAX 16A, PUR





 ⑥ Valve Terminal Power Cable	CZM/S-0.5RS	M12 straight/loose wires, A-Code, Female 5-pin, 0.5m, black with shielded, MAX 4A, PUR, loose wires exposed25mm, core wire exposed10mm
	CZM/S-1.0RS	M12 straight/loose wires, A-Code, Female 5-pin, 1m, black with shielded, MAX 4A, PUR, loose wires exposed25mm, core wire exposed10mm
	CZM/S-2.0RS	M12 straight/loose wires, A-Code, Female 5-pin, 2m, black with shielded, MAX 4A, PUR, loose wires exposed25mm, core wire exposed10mm
	CZM/S-3.0RS	M12 straight/loose wires, A-Code, Female 5-pin, 3m, black with shielded, MAX 4A, PUR, loose wires exposed25mm, core wire exposed10mm
	CZM/S-5.0RS	M12 straight/loose wires, A-Code, Female 5-pin, 5m, black with shielded, MAX 4A, PUR, loose wires exposed25mm, core wire exposed10mm
	CZM/S-10.0RS	M12 straight/loose wires, A-Code, Female 5-pin, 10m, black with shielded, MAX 4A, PUR, loose wires exposed25mm, core wire exposed10mm
	CZM/S-20.0RS	M12 straight/loose wires, A-Code, Female 5-pin, 20m, black with shielded, MAX 4A, PUR, loose wires exposed25mm, core wire exposed10mm

 ⑦ I/O Cable	CZG/S-0.5RS	M12 straight/loose wires, A-Code, Male 5-pin,, 0.5m, black with shielded, PUR, loose wires exposed25mm, core wire exposed10mm
	CZG/S-1.0RS	M12 straight/loose wires, A-Code, Male 5-pin,, 1m, black with shielded, PUR, loose wires exposed25mm, core wire exposed10mm
	CZG/S-2.0RS	M12 straight/loose wires, A-Code, Male 5-pin,, 2m, black with shielded, PUR, loose wires exposed25mm, core wire exposed10mm
	CZG/S-3.0RS	M12 straight/loose wires, A-Code, Male 5-pin,, 3m, black with shielded, PUR, loose wires exposed25mm, core wire exposed10mm
	CZG/S-5.0RS	M12 straight/loose wires, A-Code, Male 5-pin,, 5m, black with shielded, PUR, loose wires exposed25mm, core wire exposed10mm
	CZG/S-10.0RS	M12 straight/loose wires, A-Code, Male 5-pin,, 10m, black with shielded, PUR, loose wires exposed25mm, core wire exposed10mm
	CZG/S-20.0RS	M12 straight/loose wires, A-Code, Male 5-pin,, 20m, black with shielded, PUR, loose wires exposed25mm, core wire exposed10mm

 ⑧ I/O Cable	CZG/CZM-0.5RS	M12 straight/M12 straight, A-Code, Male 5-pin,/Female 5-pin, 0.5m, black with shielded, PUR
	CZG/CZM-1.0RS	M12 straight/M12 straight, A-Code, Male 5-pin,/Female 5-pin, 1m, black with shielded, PUR
	CZG/CZM-2.0RS	M12 straight/M12 straight, A-Code, Male 5-pin,/Female 5-pin, 2m, black with shielded, PUR
	CZG/CZM-3.0RS	M12 straight/M12 straight, A-Code, Male 5-pin,/Female 5-pin, 3m, black with shielded, PUR
	CZG/CZM-5.0RS	M12 straight/M12 straight, A-Code, Male 5-pin,/Female 5-pin, 5m, black with shielded, PUR
	CZG/CZM-10.0RS	M12 straight/M12 straight, A-Code, Male 5-pin,/Female 5-pin, 10m, black with shielded, PUR
	CZG/CZM-20.0RS	M12 straight/M12 straight, A-Code, Male 5-pin,/Female 5-pin, 20m, black with shielded, PUR

> Splitter






Splitters are finished pre-soldered connectors made by injection molding process, whose main function is to extend the I/O interface of the modules. Solidot offers the M12/M8 Y-splitter, the M12/M12 Y-splitter, the M12/M12 T-splitter, and the Y-splitter with extension cables. The two interfaces can be connected either directly to M8/M12 sensors or indirectly to open-end sensors via field-wireable connectors. Both connections can meet the requirements of the IP67 protection class.

	Model Number	Description
	DYG/EYM	M12/M8 Y-splitter, A-code, male 4-pin/female 3-pin
	DYG/GYM	M12/M12 Y-splitter, A-code, male 4-pin/female 3-pin
	DTG/GTM	M12/M12 T-splitter, A-code, male 4-pin/female 3-pin
	DYG/GYM-0.1C	M12/M12 Y-splitter, A-code, male 4-pin/female 3-pin, 0.1m PVC extension cable included (the length can be customized)





> Field-wireable Connector

Field-wireable connectors are often used in scenarios where cable length can be customized based on individual’ s demands. Solidot offers a screw connection solution and primarily recommends unshielded (plastic) straight connectors, which are economical and widely used on the market. The adoption of elastic rubber ring and the wire clamp inside the connector enables it to meet the IP67 protection class. In addition, Solidot offers shielded (metal) connectors on request.

	Model Number	Description
	EZG-LP	M8 straight, A-code, male 3-pin, screw connection, plastic housing

	Model Number	Description
	AZG-LP	M12 straight, D-code, male 4-pin, screw connection, plastic housing
	BZG-LP	M12 straight, L-code, male 5-pin, screw connection, plastic housing, 16A
	BZM-LP	M12 straight, L-code, female 5-pin, screw connection, plastic housing, 16A
	CZG-LP	M12 straight, A-code, male 5-pin, screw connection, plastic housing
	CZM-LP	M12 straight, A-code, female 5-pin, screw connection, plastic housing

> Accessories

	Model Number	Description
	DZG-ZP	CC-Link terminal resistance, M12 straight, A-code, female 4-pin, 110Ω, 1/2W
	PZG-LP	PROFIBUS-DP socket, vertical, no programming port, built-in terminal resistance, adjustable by slide switch
	FZM-LP	M12 female dust cap
	FZG-LP	M12 male dust cap

■ Fieldbus Solutions Focused



Nanjing Solidot Electronic Technology Co., Ltd. V1.1

Tel: 400-7788-929

E-mail: sales@solidotech.com

Website: www.solidotech.com

Address: Ang Ying Building, Shengli Road, Jiangning District, Nanjing



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