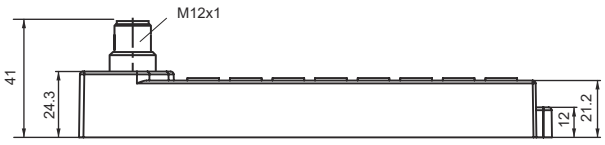
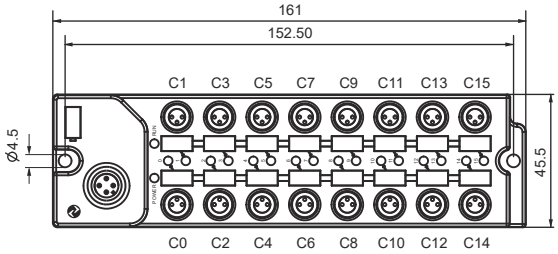
IO–Link

I/O Hub for Connecting Digital Signals to IO–Link Master

SIOL–M8–16DIP 16–Channel PNP Input

SIOL–M8–16DIN 16–Channel NPN Input

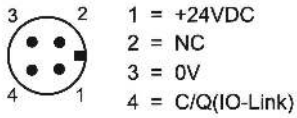




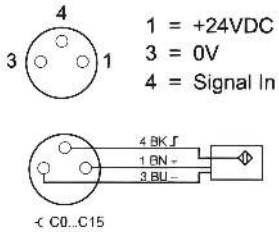
- IO–Link remote I/O device
- 16 digital input channels, M8, 3–pin
- IO–Link V1.1
- IO–Link class A, M12, A–code
- Impact and vibration resistance
- Fully potted module electronics
- Protection class IP67

Model	SIOL–M8–16DIP SIOL–M8–16DIN
Supply voltage	24VDC ± 10%
Operating current	< 100mA
Maximum Supply current	2.4A
Input	
Number of channels	16
Connectivity inputs	M8, 3–pin
Input type	PNP or NPN (Depends on the model)
Input impedance	≈3K
Input rated current	≈7mA
Input delay	3ms
Switch threshold	2mA/4mA 7V/11V
Electrical Isolation mode	Optocoupler isolation
Sensor power supply	Maximum 150mA The total C0–C15 current is limited to the maximum current of the Master port
IO–Link	
Vendor ID	1317 (0x0525)
Device ID	65810 (0x010112)
Number of ports	1
IO–Link specification	V1.1
IO–Link port type	Class A
Frame type	TYPE_2_2
Transmission rate	COM2 38.4 kbit/s
Minimum cycle time	2400us
ISDU	Supported
Block parameter operation	Not support
Data storage (DS)	Supported
Data storage lock	Supported Note: This function is supported for compatibility, but the device will not perform this operation.
Operating temperature	–20–55℃

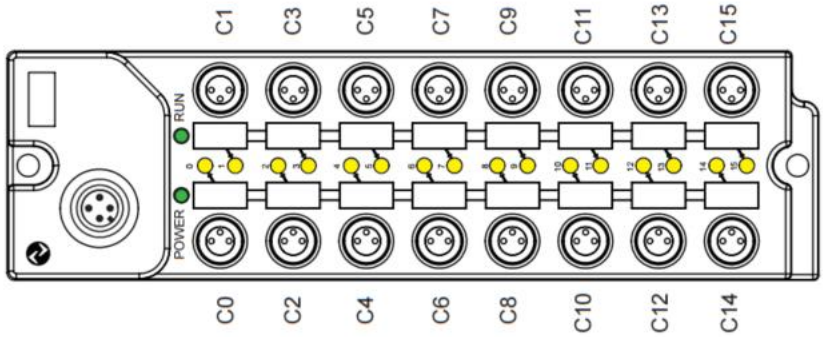
IO-Link M12 interface



Digital I/O M8 interface



User Manual



LED state

Power	Green LED ligths: ON: The module power supply is normal OFF: The module power supply is disconnected
Run	Green LED ligths: ON: The IO-Link communication is normal OFF: The IO-Link communication is not established Flash: Communication is being established, but not yet established
C0...C15	Yellow LED ligths: ON: Input active OFF: Input inactive

Process data

Byte	Bit offset							
	7	6	5	4	3	2	1	0
0	C7P4	C6P4	C5P4	C4P4	C3P4	C2P4	C1P4	C0P4
1	C15P4	C14P4	C13P4	C12P4	C11P4	C10P4	C9P4	C8P4

Note: C*P* represents the *th pin of the C* port; for example: C2P4 represents pin 4 of the C2 port;

Direct Parameter

Direct parameters are uesd to identify the device. Direct parameters are operated by index 0. The Subindex 0 represents operating the entire index; Subindex 1 represents address 0; Subindex 16 represents address 0x0F.

Index	Address	Parameter name	Length	Authority	Description
0	0x077	Vendor ID(High)	1Byte	Read	0x05 5
0	0x088	Vendor ID(Low)	1Byte	Read	0x25 37
0	0x099	Device ID(High)	1Byte	Read	0x01 1
0	0x0A10	Device ID(Median)	1Byte	Read	0x01 1
0	0x0B11	Device ID(Low)	1Byte	Read	0x12 18

Parameter data/Request data/ISDU indexed service data unit

Index	Subindex	Parameter name	Length	Authority	Description
0x02 2	0	System command	1Byte	Write	0x80 128 Reset device 0x82 130 Restore factory settings
0x10 16	0	Manufacturer name	8Byte	Read	Sentinel
0x11 17	0	Manufacturer description	41Byte	Read	Sentinel Industrial Ethernet manufacturer
0x12 18	0	Device name	15Byte	Read	SIOL-M8-16DIP_N
0x13 19	0	Device ID	7Byte	Read	6581001
0x14 20	0	Device description	30Byte	Read	I/O Module M8 16 digital Input
0x15 21	0	Serial-Number	9Byte	Read	658100101
0x16 22	0	Hardware version	8Byte	Read	HW-V0.01
0x17 23	0	Software release	8Byte	Read	FW-V0.01
0x18 24	0	ApplicationSpecific Tag	Maximum 32Byte	Read Write	This item is defined in the IODD file, Included in the DataStorage(DS)
0x19 25	0	Function Tag	Maximum 32Byte	Read Write	This item is not defined in the IODD file, It can be set directly through Index.
0x1A 26	0	Local Tag	Maximum 32Byte	Read Write	This item is not defined in the IODD file, It can be set directly through Index.
0x24 36	0	Device state	1Byte	Read	0: The equipment operating normally; 1: Need to maintain; 2: Running incorrect environment or parameters; 3: Device abeyance; 4: Device failed to run;