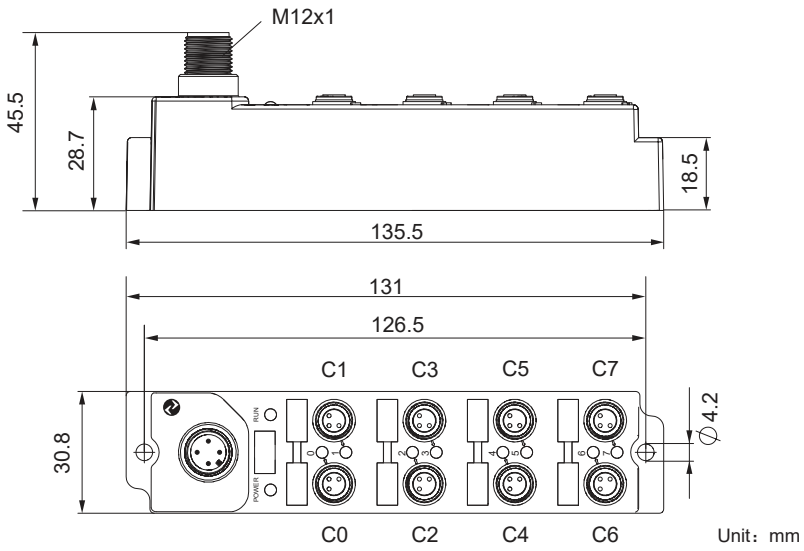
IO-Link

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

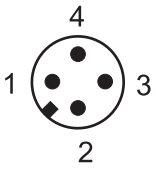
SIOL-M8A-8DO/LS　8 Universal Digital Outputs



- IO-Link remote I/O device
- 8 Digital outputs Channels，Max. 0.2 A per output
- IO-Link Protocol 1.1
- IO-Link class A，M12，A-code
- Impact and vibration resistance
- Fully potted module electronics
- Copper-plated nickel connector
- Protection classes IP67

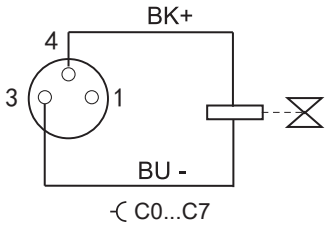
Modle	SIOL-M8A-8DO/LS
Supply voltage	24VDC ± 10%
Operating current	< 100mA(Ub)
Current required for the auxiliary power supply	< 4A Note: IO-Link Master provides power, Master parameters need to be considered
Output	
Number of channels	8 (C0-C7)
Output type	The common terminal is 0V
Output current	0.2A ; Max. 0.5 A ; Total max current < 4A
Output protection	Overload protection, overheating protection
Output protection reaction time	Approximately 20ms
Switching frequency	100HZ
Output voltage drop	0.6V
Electrical Isolation mode	Optocoupler isolation
IO-Link	
Vendor ID	1317 (0x0525)
Device ID	65824(0x010222)
Number of ports	1
IO-Link specification	V1.1
IO-Link port type	Class A
Frame type	TYPE_2_3
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



1 = +24VDC
2 = NC
3 = 0V
4 = C/Q(IO-Link)

Digital I/O M8 interface

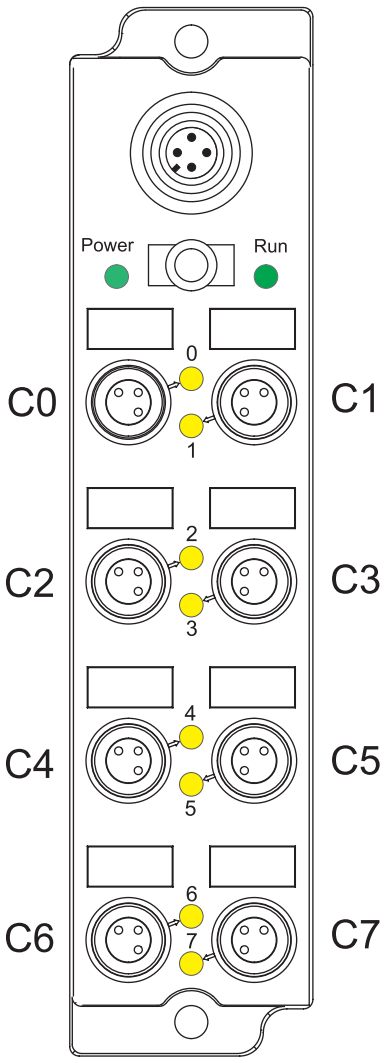


LED state

Power	Green LED lights:	ON:The module power supply (Ub) is normal OFF:The module power supply is disconnected
Run	Green LED lights	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..C7	Yellow LED lights:	ON : Input active OFF: Input inactive

Process data input

BYTE	Bit offset							
	7	6	5	4	3	2	1	0
1 (Output)	C7P4	C6P4	C5P4	C4P4	C3P4	C2P4	C1P4	C0P4



Direct Parameter

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

Index	Address	Parameter name	Length	Authority	Description
0	0x07 7	Vendor ID(High)	1Byte	Read	0x05 5
0	0x08 8	Vendor ID(low)	1Byte	Read	0x25 37
0	0x09 9	Device ID(High)	1Byte	Read	0x01 1
0	0x0A 10	Device ID(median)	1Byte	Read	0x01 2
0	0x0B 11	Device ID(low)	1Byte	Read	0x10 32

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 Device reset 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	14Byte	Read	SIOL-M8-18DO
0x13 19	0	Device ID	7Byte	Read	6582401
0x14 20	0	Device description	29Byte	Read	I/O Module 8 digital Output
0x15 21	0	Serial-Number	9Byte	Read	658240101
0x16 22	0	Hardware version	8Byte	Read	HW-V0.01
0x17 23	0	Software release	8Byte	Read	FW-V0.01
0x18 24	0	ApplicationSpecificTag	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 is operating normally；1：Need to maintain； 2：Running incorrect environment or parameters； 3：Device abeyance；4：Device failed to run；