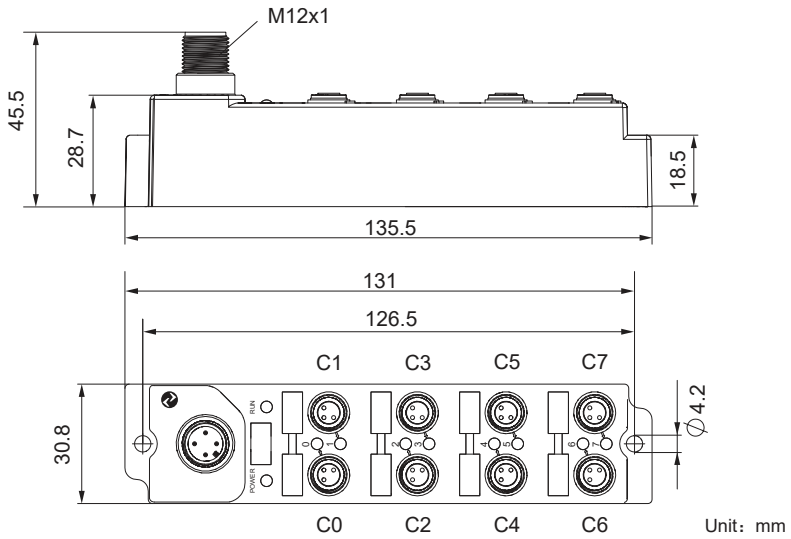
IO-Link

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

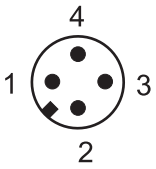
SIOL-M8A-8DON/LS　8-Channel NPN Output



- IO-Link remote I/O device
- 8-channel 0.2A digital output
- IO-Link V1.1
- IO-Link class A, M12, A-code
- Impact and vibration resistance
- Fully potted module electronics
- Protection class IP67

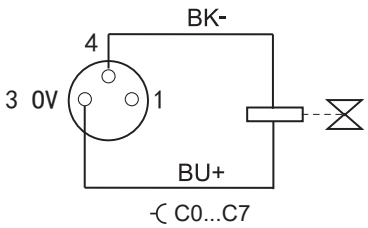
Model	SIOL-M8A-8DON/LS
Supply voltage	24VDC ± 10%
Operating current	< 100mA
Current required for the auxiliary power supply	< 4A (U_L U_B) Note: IO-Link Master provides power, Master parameters need to be considered
Output	
Number of channels	8 (C0-C7)
Output type	The common terminal is 24V (Control 0V)
Output current	0.2A (Max. 0.5A). (U_L 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 supported
Data storage（DS）	Supported
Data storage lock	Supported Note: This function is supported for compatibility, but the device does 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



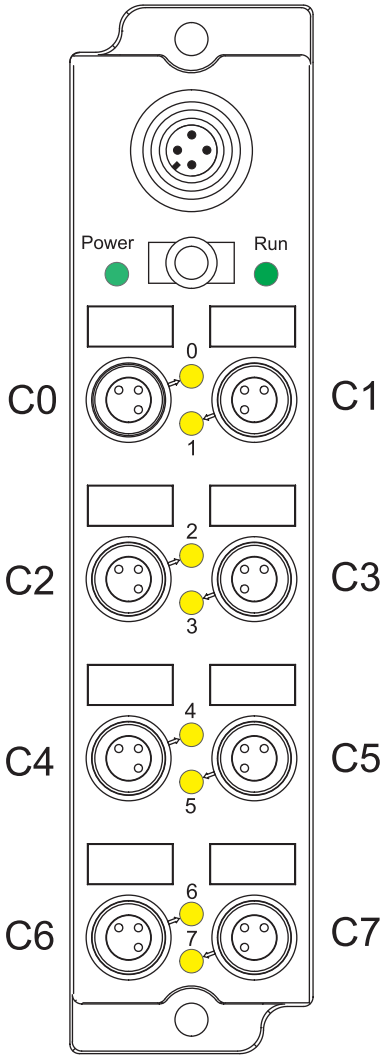
User Manual

LED state

Power	Green LED lights:	ON: The module power supply 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	0x20 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 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	11Byte	Read	SIOL-M8-8DO
0x13 19	0	Device ID	7Byte	Read	6582401
0x14 20	0	Device description	30Byte	Read	I/O Module 8 digital Output M8
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;