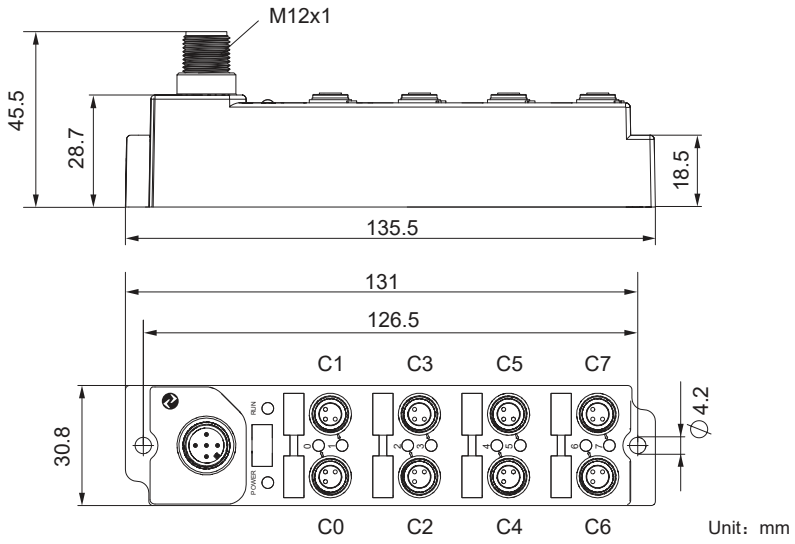
IO-Link

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

SIOL-M8B-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 B，M12，A-code
- Impact and vibration resistance
- Fully potted module electronics
- Copper-plated nickel connector
- Protection classes IP67

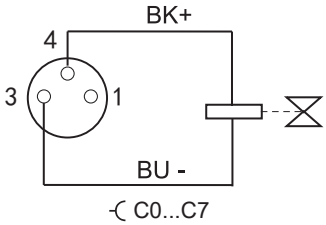
Modle	SIOL-M8B-8DO/LS
Supply voltage	24VDC ± 10%
Operating current	< 100mA(U_b)
Power load	Not to exceed 4A (UI)
Output	
Number of channels	8 (C0-C7)
Output type	The common terminal is 0V
Output current	0.2A ; Max. 0.5 A (The total current of UI shall not exceed 4A)
Output protection	Overload protection, 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 B
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 (U_b)
2 = L+ (U_l)
3 = 0V (U_b)
4 = C/Q(IO-Link)
5 = L- (U_l)

Digital I/O M8 interface

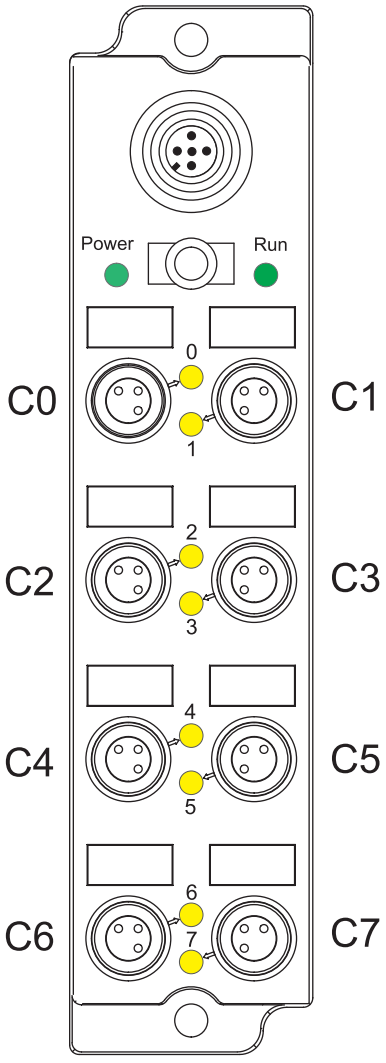


LED state

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 字节数	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 1
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-M8B-8DO
0x13 19	0	Device ID	7Byte	Read	6581401
0x14 20	0	Device description	29Byte	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；