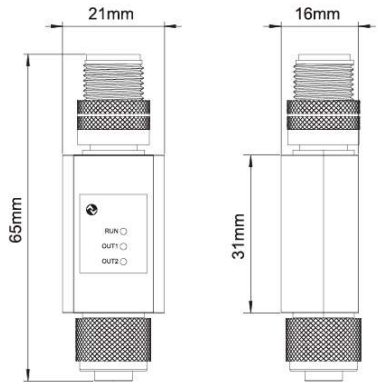
IO-Link Converter

Dual-channel 0—10 V Output

CIOL-2VO-SC

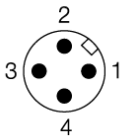


单位：mm

- IO-Link Device Converters
- Dual-channel 0—10V output,M12 4-pin female
- IO-Link V1.1
- IO-Link class A, M12, A-code,4-pin male
- Transparent Housing with LED Indicators

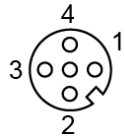
Model	CIOL-2VO-SC
Supply voltage	24VDC ± 10%
Operating current	< 50mA
External Power Supply Output	Max 500mA(Note: External supply via pin 1 and pin 3 of M12 female connector)
Analog output	
Number of channels	2
Connectivity inputs	M12 A-coded,4-pin female
output type	0-10V analog output
output resolution	≤12bits
output accuracy	0.5%F.S
Data format	data in mV
Max output range	0-10V
Analog Output Max Load	4.7KΩ
IO-Link	
Vendor ID	1317 (0x0525)
Device ID	262689(0x040221)
Number of ports	1(M12 A-code 4-pin male)
IO-Link specification	V1.1
IO-Link port type	Class A
IO-Link output byte	4bytes
Frame type	TYPE_2_V
Transmission rate	COM2 38.4kbit/s
Minimum cycle time	4000us
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	-25...80℃

IO-Link M12 interface 4-pin male



1 = +24VDC
2 = NC
3 = 0V
4 = C/Q

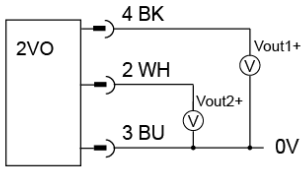
Output Signal M12 interface 4-pin female



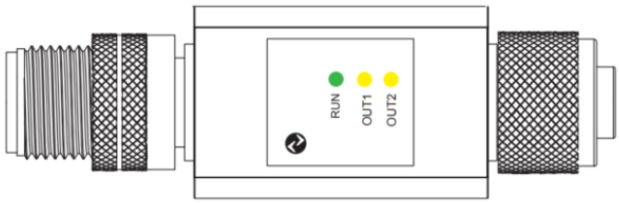
1 = +24VDC
2 = OUT2
3 = 0V
4 = OUT1

注：OUT1、OUT2:Analog output channel

Wiring Diagram



User Manual



LED State

RUN	green On:IO-Link communication established Off:Communication not Blinking:Communication is being established
OUT1	Output Channel 1,Yellow On:Signal Output Off:No signal Output
OUT2	Output Channel 1,Yellow On:Signal Output Off:No signal Output

Note: If the given output for OUT1 or OUT2 exceeds 10 V, the output will be limited to 10 V and the yellow LED will flash.

Process Data Output Data

OUT1	**BYTE**	**BYTE0**								**BYTE1**							
	BIT	31	30	29	28	27	26	25	24	23	22	21	20	29	18	17	16
	DATA	bit15	bit14	bit13	bit12	bit11	bit10	bit9	bit8	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0

OUT2	**BYTE**	**BYTE2**								**BYTE3**							
	BIT	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	DATA	bit15	bit14	bit13	bit12	bit11	bit10	bit9	bit8	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0

Note: The 16-bit data for each port is unsigned and expressed in millivolts (mV); the output range of 0–10 V corresponds to 0–10000.

Direct Parameter page 1

Direct parameters are used to identify the device.Direct parameters are operated by index0.
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	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	0x04 4
0	0x0A 10	Device ID(Median)	1Byte	Read	0x02 2
0	0x0B 11	Device ID(Low)	1Byte	Read	0x21 33

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	12Byte	Read	CIOL-2xO-SC
0x13 19	0	Device ID	8Byte	Read	26268901
0x14 20	0	Device description	34Byte	Read	Converter io-link to analog output
0x15 21	0	Serial-Number	9Byte	Read	2626890101
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;