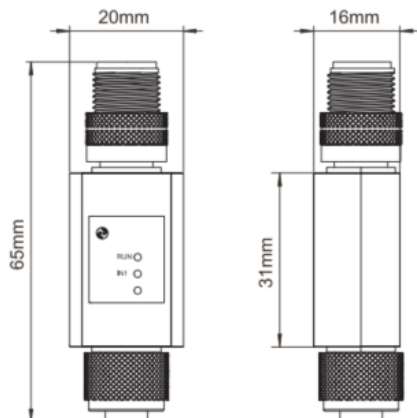


IO-Link Converter

Single-channel Pt100 Input

CIOL-PT12-SC

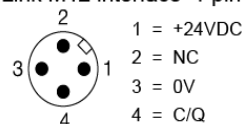
SENTINEL
INDUSTRIAL AUTOMATION



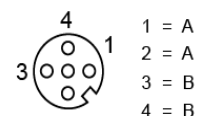
- IO-Link Device Converters
- Single-channel Pt100 Input, M12 4-pin female
- IO-Link V1.1
- IO-Link class A, M12, A-code, 4-pin male
- Transparent Housing with LED Indicators

Model	CIOL-PT12-SC
Supply voltage	24VDC $\pm$ 10%
Operating current	< 50mA
RTD Input	
Number of Input channels	1
Input Signal Type	Pt100 2/3/4
Interface type	M12 5-pin female
Measuring range	-200...600°C
Input accuracy	$\pm$ 0.5°C
IO-Link	
Vendor ID	1317 (0x0525)
Device ID	262674(0x040212)
Number of ports	1(M12 A-code 4-pin male)
IO-Link specification	V1.1
IO-Link port type	Class A
IO-Link input byte	2bytes
Frame type	TYPE_2_2
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°C

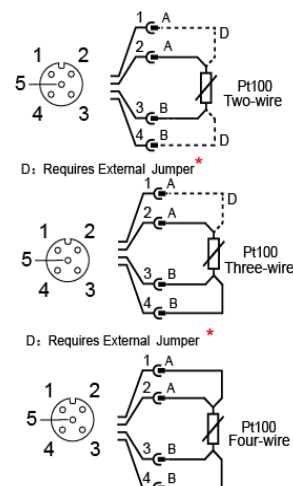
IO-Link M12 interface 4-pin male



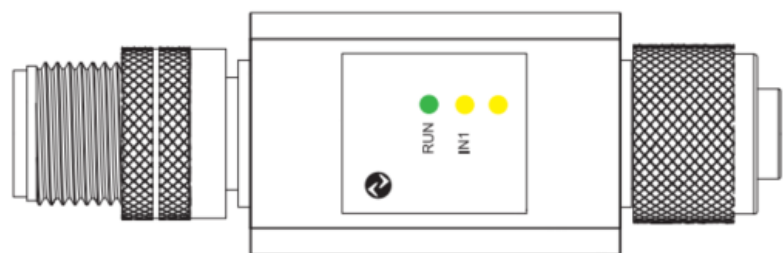
Input signal M12 interface 4-pin female



RTD Connection



*: It is recommended to short at the PT100 side. If shorting is done at the converter input port, the sensor's measurement accuracy may be reduced.



LED State

RUN	green On:IO-Link communication established Off:Communication not Blinking:Communication not yet established.
IN1	Yellow On:Signal input detected Off:No input signal detected or the wiring is incorrect.

Process Data Output Data

IN1	BYTE	BYTE0								BYTE1							
	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 channel data is a signed value in units of °C, ranging from -2000 to 6000,meaning the actual temperature is scaled by a factor of 10. (When the temperature data is invalid, the value is 4096)

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 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	0x04 4
0	0x0A 10	Device ID(Median)	1Byte	Read	0x02 2
0	0x0B 11	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	16Byte	Read	CIOL-PTxx-TCx-SC
0x13 19	0	Device ID	8Byte	Read	26267401
0x14 20	0	Device description	29Byte	Read	Converter RTD or TC to io-link
0x15 21	0	Serial-Number	9Byte	Read	2626740101
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	ApplicationSpecificTag is a special identifier used for the device in the application.This item is defined in the IODD file, Included in the DataStorage(DS)
0x19 25	0	Function Tag	Maximum 32Byte	Read Write	FunctionTag is a special identifier used for the device in the application.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	LocationTag is a special identifier used for the device in the application.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;