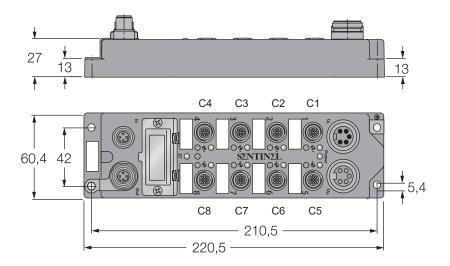
### Compact I/O Module for



## 8 IO-Link Master Channels ELPN-8IOL-0001

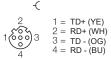




- Profinet remote I/O module
- Integrated Ethernet Switch
- Support 100Base-TX
- 2XM12,4-pin,D-code,Ethernet Fieldbus connection
- 8 IO-Link Master Channels
- IO-Link Protocol 1.1
- IO-Link master port class A
- M12 ports for IO-Link master, 5-pin
- Impact and vibration resistance
- Fully potted module electronics
- Copper-plated nickel connector
- Protection classes IP67

Modle	ELPN-8IOL-0001
Supply voltage	24VDC ± 10%
Operating current	< 200mA
Supply current	>8A
IO-LINK port parameters	
Number of ports	8 (C1C8)
Connectivity inputs	M12, A-code, 5-pin
Common IO	Not supported, Pin 2 needs to be empty
Current supply per port	Maximum 2A
	C1C4 Total current max 4 A
	C5C8 Total current max 4 A
IO-LINK parameters	
SIO model	Not Supported(Pin 4 cannot be used as common IO)
IO-Link Pin definition	Pin 4 in IOL mode
IO-Link Port type	Class A
IO-Link specification	Version 1.1
Frame type	Supports all specified frame types
Support Device	Maximum 32Bytes Input / 32Bytes Output
Transmission rate	4.8kbps(COM1) / 38.4kbps(COM2) / 230.4kbps(COM3)
PROFINET	
Number of communication interface	2
Transmission standed	100Base-TX
Auto-negotiation	Supported
Auto-MDI/MDIX	Supported
Maximum transmission rate	100Mbit/s
Fieldbus connection technology	2x M12, 4-pin, D-coded
Operating temperature	-20+55 °C

#### Bus Connector M12



#### IO-LINK Port Connector M12

-( C1...C8 1 = L+ 2 = NC 3 = 0V 4 = C/Q (IO-Link) 5 = NC

#### Power Supply Connector 7/8"



Note: UB is the module power supply, and UL is the load power supply Note: UL is not used inside the module, so it is unnecessary to connect it. Ui to Uo is directly connected

		Description			
		LED name	Detailed introduction		
I	Module LEDS	Power	Green LED lights: ON:The module power supply (Ub) is normal OFF:The module power supply is disconnected		
		BF	Red LED lights: ON: BUS no connection Flashing: The connection is normal, but no communication was established with profinet I/O controller OFF: Communication has been established with profinet I/O controller		
		STAT	Yellow LED lights: The IO-Link communication status of the port (C1 - C8) ON: The IO-Link communication is normal OFF: The IO-Link communication is not established		
		ERR	Red LED light: Working state of the port  ON: The port is working abnormally; please check the IO-Link cable and parameter setting of IO-Link in profinet configuration  OFF: No error in this port; IO-Link Communication is normal OR this port is closed or deactivated in profinet configuration		
II	Power suppy	Ui ( left ) : Power suppy input , 7/8", 5-pin , male Uo ( right ) : Power suppy output , 7/8", 5-pin , female			
III	IO-Link PORT	M12 A-code , 5-pin ; Pin 4 is IO-LINK; Pin 2 is empty , no external signals can be connected.  C* in the figure represents the * th port; The STAT represents the communication status indicator lamp; The ERR represents the working status indicator lamp.  For example, C1 STAT represents that the port is PORT1, The LED above the right of the port is STAT and the LED below is ERR.  Totally is 8 IO-link port class A , every port is independent lamp for START & ERR. External power supply is required for class B device.  Note: Please close the port in the profinet configuration when not used , try not to let the module have a red light.			
IV	Bus	In(left): Profinet Bus in,M12,D-Code, 4-pin,female Out(right): Profinet Bus out,M12,D-Code, 4-pin,female			
V	PE	Ground connection			
VI	Network status LEDS	LINK1	Bus in , Green LED lights: ON : This port establishes a physical connection OFF: No connection is established on this port		
		ACT1	Bus in ,Yellow LED lights: ON: This port has data exchange OFF: There is no data exchange for this port		
		LINK2	Bus out , Green LED lights: ON : This port establishes a physical connection OFF: No connection is established on this port		
		ACT2	Bus out , Yellow LED lights: ON : This port has data exchange OFF: There is no data exchange for this port		



Name		Description	
8 Port IO-Link Current Status	BYTE1	Status of 8 IO-Link ports  0: Communication is interrupted 1: Normal communication  Bit0: PORT1 current state Bit1: PORT2 current state Bit5: PORT6 current state Bit2: PORT3 current state Bit3: PORT4 current state Bit3: PORT4 current state	
8 Port IO-Link Error Status	BYTE2	Error Status of 8 IO-Link ports  0: There is no error 1: Error occurred  Bit0: PORT1 Error status Bit1: PORT2 Error status Bit2: PORT3 Error status Bit3: PORT4 Error status Bit3: PORT4 Error status Bit7: PORT8 Error status	
Error Times_Port1 Error Times_Port2 Error Times_Port3 Error Times_Port4 Error Times_Port5 Error Times_Port6 Error Times_Port7 Error Times_Port8	BYTE3 BYTE4 BYTE5 BYTE6 BYTE7 BYTE8 BYTE9 BYTE10	Number of port errors  Starting from module power-on. Accumulate the number of times the IO-LINK device is cut off.  The module is powered on again, and the number of errors is cleared.	

# $\prod$ C1 STA ERR STATC6 $C2\frac{STAT}{ERR}$ STAT ERR C3 STAT STAT ERR **(3**) ${ m W}$ enlarged drawing LINK2 ACT2 IACT1

 $\prod$ 

#### Description of port general setting parameters

#### Operation mode selection

No Check ID : Do not detect ID;Communication is established whenever the port is connected to the Device.

Check ID: Both Vendor ID and Device ID were detected. If it does not match the actual equipment, normal communication will not be established.

Not use: This port remains unused; When this option is selected, this port is assigned an address in Profinet.

Note: If you want the port to occupy no address, just leave the slot of the port empty.

#### Data storage mode

This version is not supported.

#### Cycle time

Select the cyclic scanning time of the port Device; Better choose "automatic", If the set cycle time is less than the minimum cycle time supported by Device, the communication may be abnormal.

#### Vendor ID and Device ID

If you choose "Check ID", these two parameters should be filled in correctly according to the device manufacturer's instructions, otherwise the communication cannot be established.