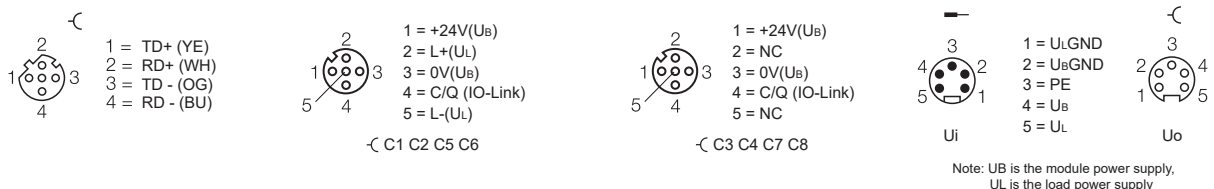


- Profinet remote I/O module
- Integrated Ethernet Switch
- Support 100Base-TX
- 2XM12, 4-pin, D-coded, Ethernet Fieldbus connection
- 8 IO-Link Master Channels
- IO-Link Protocol 1.1
- IO-Link master port 4 class A+4 class B
- IO-Link master port M12 A-coded
- Metal connector with high-strength plastic housing
- Impact and vibration resistance
- Fully potted module electronics
- Protection class IP67

Model	ELPN-8IOL-004B
Supply voltage	24VDC $\pm$ 10%
Operating current	< 200mA
Module power ( $U_B$ )	$\leq$ 8A
Load power ( $U_L$ )	$\leq$ 8A
<b>IO-LINK port parameters</b>	
Number of ports	8 (C1...C8)
Connectivity inputs	M12, A-coded, Female
Port supply current	Rated 1A, max 2A: $U_B$ from pins 1,3; Among: C1...C4, C5...C8 $\leq$ 4A each. Max 2A: $U_L$ from pins 2,5; Among: C1,C2, C5,C6 $\leq$ 4A each.
<b>IO-LINK parameters</b>	
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 (C3 C4 C7 C8)+Class B (C1 C2 C5 C6)
IO-Link specification	Protocol 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)
<b>PROFINET</b>	
Number of communication interface	2
Transmission standard	100Base-TX
Auto-negotiation	Supported
Auto-MDI/MDIX	Supported
Maximum transmission rate	100Mbit/s
Fieldbus connection technology	M12, D-coded, Female
Operating temperature	-20-55 $^{\circ}$ C

Bus Connector M12 IO-LINK Port Connector M12 IO-LINK Port Connector M12 Power Supply Connector 7/8"



Area Code	Project	Description	
I	Module LEDs	LED name	Detailed introduction
		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 supply	Ui ( left ) : Power supply input, 7/8" , 5-pin, male Uo ( right ) : Power supply output, 7/8" , 5-pin, female	
III	IO-Link PORT	<ul style="list-style-type: none"> <li>M12 A-coded, 5-pin, female; Pin 4 is IO-Link, Does not support SIO, i.e., Standard I/O mode; Pin 2 is empty, no external signals can be connected.</li> <li>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<sup>STAT</sup><sub>ERR</sub> represents that the port is PORT1, The LED above the right of the port is STAT and the LED below the right is ERR; For detailed information on the indicator lights, please refer to Area Code I .</li> <li>A total of 8 IO-Link ports, 4 each for Class A and Class B, each port has independent STAT and ERR;</li> </ul> <p>Note : Please close the port in the profinet configuration when not used , try not to let the module have a red light.</p>	
IV	Bus	In ( left ) : Profinet Bus in, M12, D-Coded, 4-pin, male Out ( right ) : Profinet Bus out, M12, D-Coded, 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

### IO-Link Device Status

Name		Description	
8 Port IO-Link Current Status	BYTE1	Status of 8 IO-Link ports Bit0 : PORT1 current state Bit1 : PORT2 current state Bit2 : PORT3 current state Bit3 : PORT4 current state	0: Communication is interrupted 1: Normal communication Bit4 : PORT5 current state Bit5 : PORT6 current state Bit6 : PORT7 current state Bit7 : PORT8 current state
8 Port IO-Link Error Status	BYTE2	Error Status of 8 IO-Link ports Bit0 : PORT1 Error status Bit1 : PORT2 Error status Bit2 : PORT3 Error status Bit3 : PORT4 Error status	0: There is no error 1: Error occurred Bit4 : PORT5 Error status Bit5 : PORT6 Error status Bit6 : PORT7 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.	

### Description of port general setting parameters

#### Operation mode selection

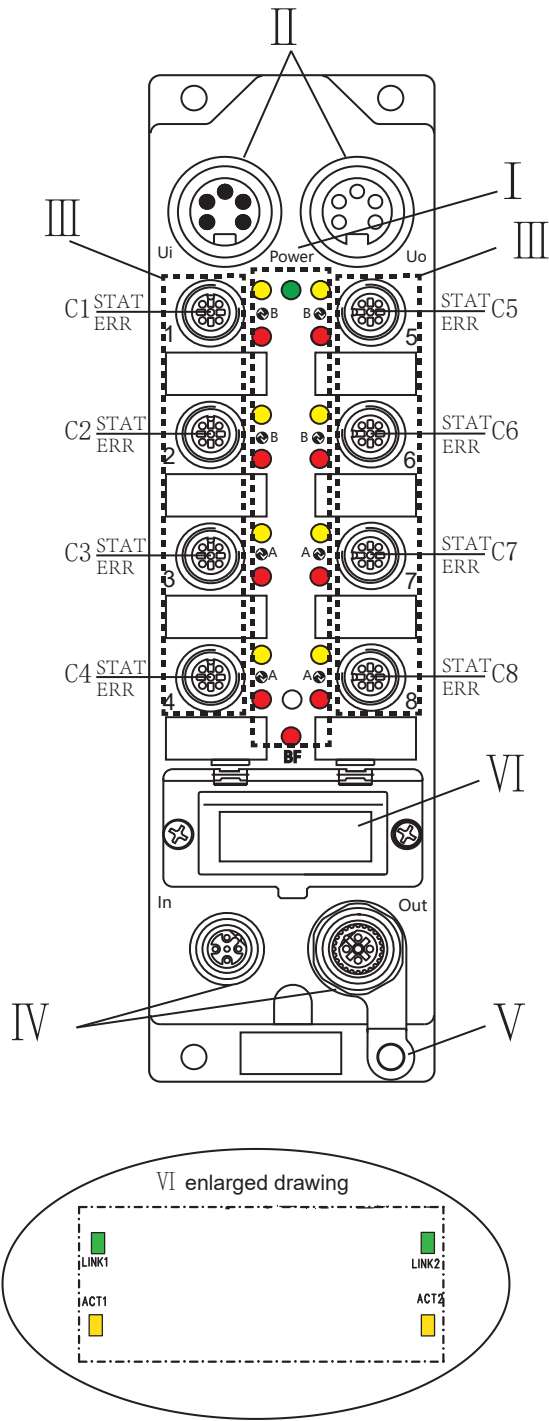
No Check ID: Communication is established whenever the port is connected to the Device.

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, the module won't operate.



#### 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.