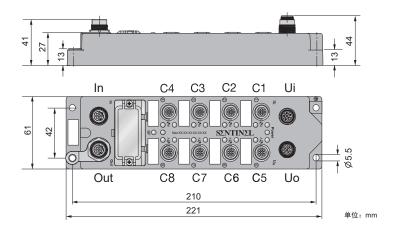


8 IO-Link Master Channels ELPN-8IOL-L001

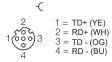




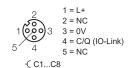
- Profinet remote I/O module
- Integrated Ethernet Switch
- Support 100Base-TX
- 2XM12, 4-pin, D-code, Ethernet Fieldbus connection
- 8 IO-Link Master Channels
- IO-Link V1.1
- IO-Link master port class A
- IO-Link master port M12 A-coded
- Metal connector with high-strength plastic housing
- Impact and vibration resistance
- Fully potted module electronics
- Protection class IP67

| Model | ELPN-8IOL-L001 | | |
|-----------------------------------|---|--|--|
| Supply voltage | 24VDC ± 10% | | |
| Operating current | < 200mA | | |
| Supply current | > 8A | | |
| IO-Link port parameters | | | |
| Number of ports | 8 (C1C8) | | |
| Connectivity inputs | M12, A-coded, Female | | |
| Common IO | Not supported, Pin 2 needs to be empty | | |
| Current supply per port | Maximum 2A (Pin 1 provides current to the device) | | |
| | Among: 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 (Pin 2 need to be vacant) | | |
| IO-Link specification | V1.1 | | |
| 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 standard | 100Base-TX | | |
| Auto-negotiation | Supported | | |
| Auto-MDI/MDIX | DI/MDIX Supported | | |
| Maximum transmission rate | num transmission rate 100Mbit/s | | |
| Connector | M12, D-coded, Female | | |
| Operating temperature | -20-55 °C | | |

Bus Connector M12



IO-Link Port Connector M12



Power Supply Connector L-coded



Note: Us 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

| Area Code | Project | Description | | | |
|--------------|---------------------------|--|---|--|--|
| I | Module LEDS | LED name | Detail | | |
| | | Power | Green LED lights: ON:The module power supply (U _B) 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, L-coded, 5-pin, male Uo (right): Power supply output, L-coded, 5-pin, female | | | |
| Ш | IO-Link PORT | 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. 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; For detailed information on theindicator lights, please refer to Area Code I. | | | |
| | | Totally is 8 External po | IO-link port class A, every port is independent lamp for START & ERR. wer supply is required for class B device. close the port in the profinet configuration when not used, try not to let the | | |
| IV | Bus | In (left): Profinet Bus in, M12, D-Coded, 5-pin, female Out(right): Profinet Bus out, M12, D-Coded, 5-pin, female | | | |
| V | PE | Ground connection | | | |
| | Network status LEDS | LINK1 | Bus in, Green LED lights: ON:This port establishes a physical connection OFF:No connection is established on this port | | |
| VI | | 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 | | |
|---|---|--|--|--|
| | BYTE1 | Status of 8 IO-Link ports | 0: Communication is interrupted 1: Normal communication | |
| 8 Port IO-Link Current Status | | Bit0: PORT1 current state Bit1: PORT2 current state Bit2: PORT3 current state Bit3: PORT4 current state | 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 | 0: There is no error 1: Error occurred | |
| | | Bit0: PORT1 Error status Bit1: PORT2 Error status Bit2: PORT3 Error status Bit3: PORT4 Error status | Bit4: PORT5 Error status Bit5: PORT6 Error status Bit6: PORT7 Error status Bit7: PORT8 Error status | |
| Error Times_Port1 Error Times_Port2 | BYTE3 BYTE4 | Number of port errors | | |
| Error Times_Port3 Error Times_Port4 Error Times_Port5 Error Times_Port6 Error Times_Port7 Error Times_Port8 | BYTE5 BYTE6 BYTE7 BYTE8 BYTE9 BYTE10 | 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. | | |

C3 STAT BRR STATC7 ERR C4 STAT Out VI enlarged drawing LINKT ACTI A

Uo

STAT C5

STAT ERR

 \prod

C1 STAT

 $C2\frac{STAT}{ERR}$

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 used: 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.