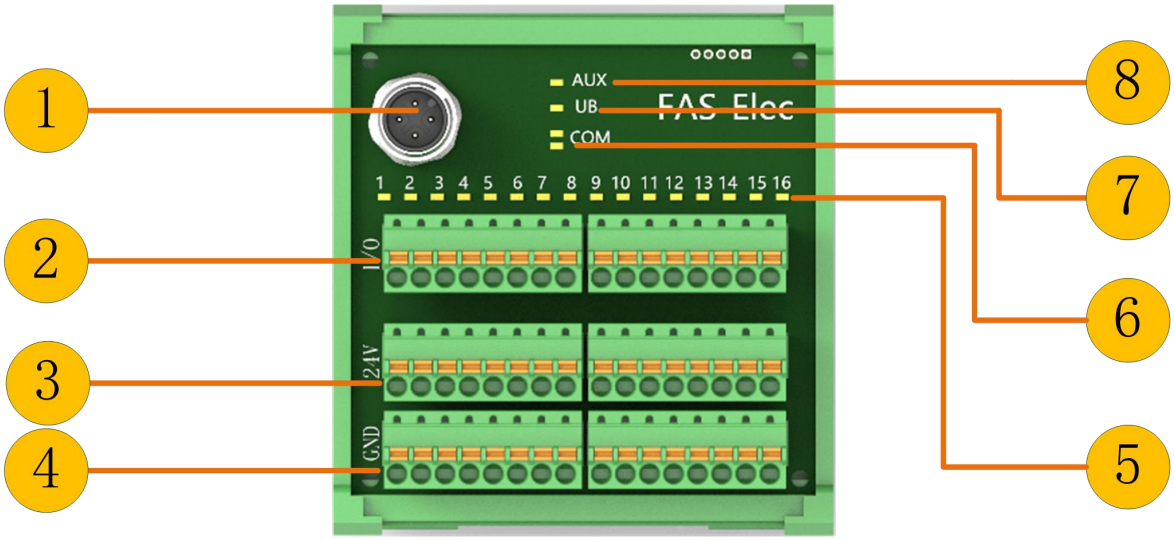
FNI_IOL-310-S01-K024 00BH11

# User ’s manual

## 1. Connection diagram

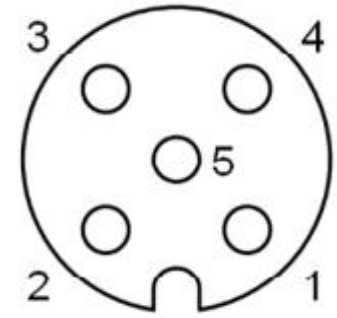



1 IO-Link Interface
2 I/O connecting terminal
3 Sensor supply 24V connecting terminal
4 Sensor supply GND connecting terminal
5 Indicator light:Input/Output
6 Indicator light:IO-Link communication
7 Indicator light:Sensor supply
8 Indicator light:Actuator supply



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## 2. IO-Link Interface definition

| IO-Link(Class A) | Pin | Description | Wire Color |
|---|---|---|---|
|  | 1 | Sensor supply | Brown |
| | 2 | Actuator supply | White |
| | 3 | GND | Blue |
| | 4 | C/Q IO-Link | Black |
| | 5 | Not connected | - |

## 3. IO-Link Data

### 3.1 Parameter

| | |
|---|---|
| Baud rate | COM2 (38.4kbit/s) |
| Cycle time(Minimum) | 3ms |
| Process data Cycle time | 3ms |
| Process data length | 2 Byte Input, 2 Byte Output |

### 3.2 Process data

| Digital I/O Pin | Input Data | Output Data |
|---|---|---|
| 1 | Byte0 Bit0 | Byte0 Bit0 |
| 2 | Byte0 Bit1 | Byte0 Bit1 |
| 3 | Byte0 Bit2 | Byte0 Bit2 |
| 4 | Byte0 Bit3 | Byte0 Bit3 |
| 5 | Byte0 Bit4 | Byte0 Bit4 |
| 6 | Byte0 Bit5 | Byte0 Bit5 |
| 7 | Byte0 Bit6 | Byte0 Bit6 |
| 8 | Byte0 Bit7 | Byte0 Bit7 |
| 9 | Byte1 Bit0 | Byte1 Bit0 |
| 10 | Byte1 Bit1 | Byte1 Bit1 |
| 11 | Byte1 Bit2 | Byte1 Bit2 |
| 12 | Byte1 Bit3 | Byte1 Bit3 |
| 13 | Byte1 Bit4 | Byte1 Bit4 |
| 14 | Byte1 Bit5 | Byte1 Bit5 |
| 15 | Byte1 Bit6 | Byte1 Bit6 |
| 16 | Byte1 Bit7 | Byte1 Bit7 |



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## 3.3 Identification/Parameter data

| | SPDU | | Object name | length | Range | Default value |
|---|---|---|---|---|---|---|
| | Index | Sub Index | | | | |
| | / | / | Supplier ID | 2 | / | 0x0454 |
| | / | / | Device ID | 3 | / | 0x099CE2 |
| Identification data | 0x10 | 0 | Supplier Name | 19 | Read only | FAS(Fujian)Co.,LTD |
| | 0x11 | 0 | Supplier Text | 16 | | www.fas-elec.com |
| | 0x12 | 0 | Product name | 13 | | FNI IOL-310-S01-K024 |
| | 0x13 | 0 | Product ID | 5 | | 00BH11 |
| | 0x14 | 0 | Product Text | 44 | | IO-Link DI/DO |
| | 0x16 | 0 | Hardware Version | 3 | | 20211105 |
| | 0x17 | 0 | Firmware Version | 3 | | 2.01 |
| Parameter data | 0x40 | 0 | Bit inversion | 2 | 0x0000~ 0xFFFF | 0x0000 |
| | 0x41 | 0 | Input/Output Setting | 2 | 0x0000~ 0xFFFF | 0x0000 |

Note

1. 0x40 Bit inversion : bit=0 not reverse, bit=1 reverse.

For example:

The external input is 0x0000. When 0x40 is 0x0000, the value is 0x0000 (not reverse), and when 0x40 is 0xFFFF, the value is 0xFFFF (reverse).

2. 0x41 Input/Output Setting: bit=0 input, bit=1 output.



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## 3.4 Error code

Device application error code 0x80:

Additional code:

0x11 index not available

0x12 sub index not available

0x30 Value Out of range

## 3.5 Event

| Class/Qualifier | | | Code(High Bit + Low Bit) | | | |
|---|---|---|---|---|---|---|
| Pattern | Type | Instance | | | | |
| Appear | Error | AL | Hardware | Power supply | Low voltage | U2=power supply |
| 0xC0 | 0x30 | 0x03 | 0x5000 | 0x0100 | 0x0010 | 0x0002 |
| | 0xF3 | | 0x5112 | | | |
| Disappear | Error | AL | Hardware | Power supply | Low voltage | U2=power supply |
| 0x80 | 0x30 | 0x03 | 0x5000 | 0x0100 | 0x0010 | 0x0002 |
| | 0xB3 | | 0x5112 | | | |
| Appear | Error | AL | Hardware | Power supply | Peripheral power supply | |
| 0xC0 | 0x30 | 0x03 | 0x5000 | 0x0100 | 0x0060 | |
| | 0xF3 | | 0x5160 | | | |
| Disappear | Error | AL | Hardware | Power supply | Peripheral power supply | |
| 0x80 | 0x30 | 0x03 | 0x5000 | 0x0100 | 0x0060 | |
| | 0xB3 | | 0x5160 | | | |



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