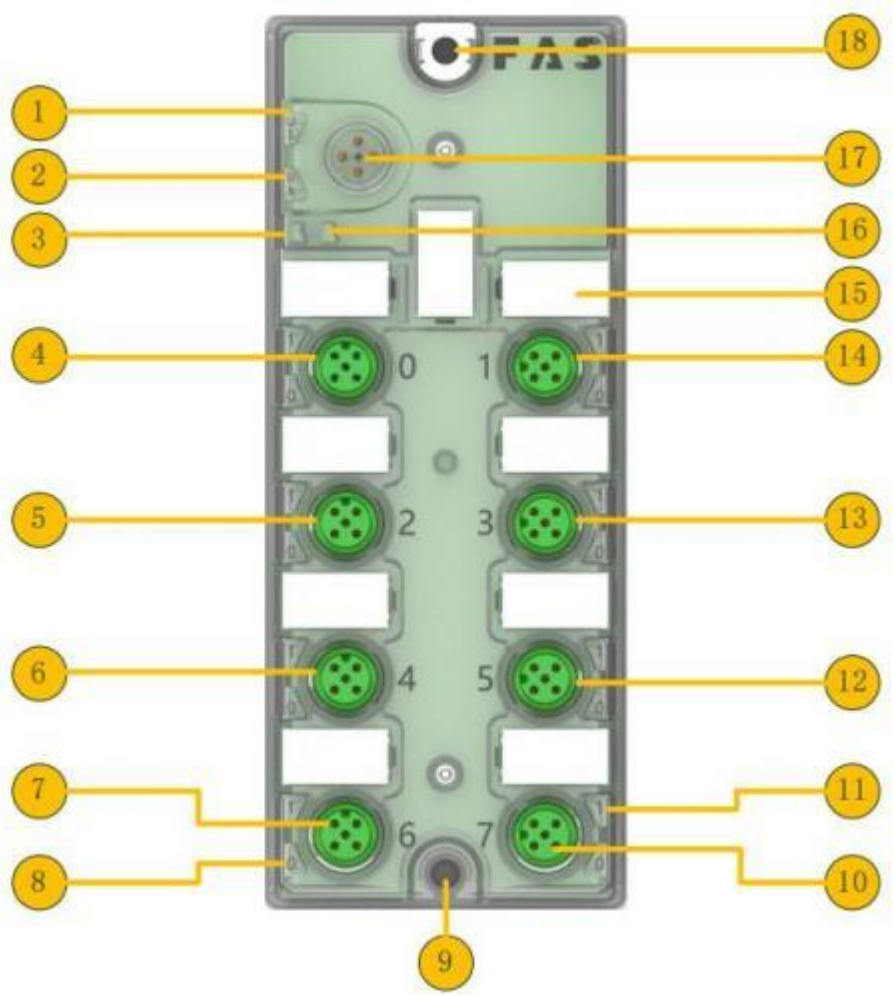
FNI IOL-236-000-M12 manual

1. Connection diagram

As shown in Figure 1.



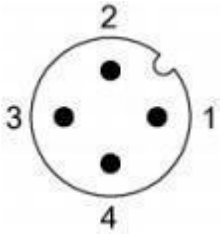
Picture1

1 Status LED: Power
2 Status LED: Actuator power supply
3 Status LEDs: IO-Link
4 Digital I/O Port 0
5 Digital I/O port 2
6 Digital I/O Ports 4
7 Digital I/O Port 6
8 Status LED: Digital I/O Port 4 Pin4
9 Fixing holes
10 Digital I/O Port 7
11 Status LED: Digital I/O port 4 Pin2
12 Digital I/O port 5
13 Digital I/O Port 3
14 Digital I/O port 1
15 Labels
16 Status LED: Abnormal
17 IO-Link Interface
18 Fixing holes

2. IO-Link interface diagram

As shown in Figure 2.

M12, class A, male



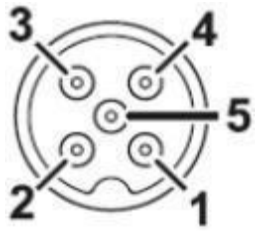
Pin	Illustrate
1	Power supply, +24V
2	Actuator power supply, +24V
3	GND
4	C/Q, IO-Link data transfer channel

Picture 2

3. Digital Port Connection Diagram

As shown in Figure 3.

Digital output port (M12, type A, female)



Pin	Function
1	Power, +24V
2	Digital output
3	Power, GND
4	Digital output
5	FE

Picture 3

IO-Link data

4.1 Parameter

As shown in Table 1-1.

Surface 1-1

Data transmission baud rate	COM2 (38.4kbit/s)
Frame type	2.V
Minimum cycle time	3ms
Process data cycle time	3ms, consistent with minimum cycle time
Process data length	2 bytes output

4.2 Process data/input data

None

4.3 Process data/output data

As shown in Figure 5.

	0								1							
Bit	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Describe	output port 7 Pin4	output port 6 Pin4	output port 5 Pin4	output port 4 Pin4	output port 3 Pin4	output port 2 Pin4	output port 1 Pin4	output port 0 Pin4	output port 7 Pin2	output port 6 Pin2	output port 5 Pin2	output port 4 Pin2	output port 3 Pin2	output port 2 Pin2	output port 1 Pin2	output port 0 Pin2

Picture 5

For example: the assigned starting address is 64, then the port 0 Pin2 is 65.0, and the port 0 Pin4 is 64.0.

4.4 Parameter data/request data

As shown in Figure 6.

	DPP	SPDU		Object name	length	Scope	Defaults
	Index	Index	Subindex				
Identification data				Supplier ID	2		0x0454
				Device ID	3		0x0994C7
		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-236-000-M12
		0x13	0	Product ID	5		00BC31
		0x14	0	Product text	44		IO-Link M12 PNP 16_DO
		0x16	0	Hardware version	3		20211010
		0x17	0	Firmware version	3		2.01
Parameter data							

Picture 6

4.5 Mistake

As shown in Figure 7.

Error code	Additional code
Device app error 0x80	Index unavailable 0x11
	Subindex unavailable 0x12
	Value out of range 0x30

Picture7

4.6 Event

As shown in Figure 7.

Class/Qualifier			Code(High Bit + Low Bit)			
Pattern	Type	Instance				
Appear	Error	AL	Hardware	Powered by	Power supply low voltage	U2=Power supply+24V
0xC0	0x30	0x03	0x5000	0x0100	0x0010	0x0002
0xF3			0x5112			
Disappear	Error	AL	Hardware	Powered by	Power supply low voltage	U2=Power supply+24V
0x80	0x30	0x03	0x5000	0x0100	0x0010	0x0002
0xB3			0x5112			
Appear	Error	AL	Hardware	Powered by	Peripheral power supply	
0xC0	0x30	0x03	0x5000	0x0100	0x0060	
0xF3			0x5160			
Disappear	Error	AL	Hardware	Powered by	Peripheral power supply	
0x80	0x30	0x03	0x5000	0x0100	0x0060	
0xB3			0x5160			

Picture 8