FNI IOL-134-000-M12 manual

1. As shown in Figure

As shown in Figure 1.
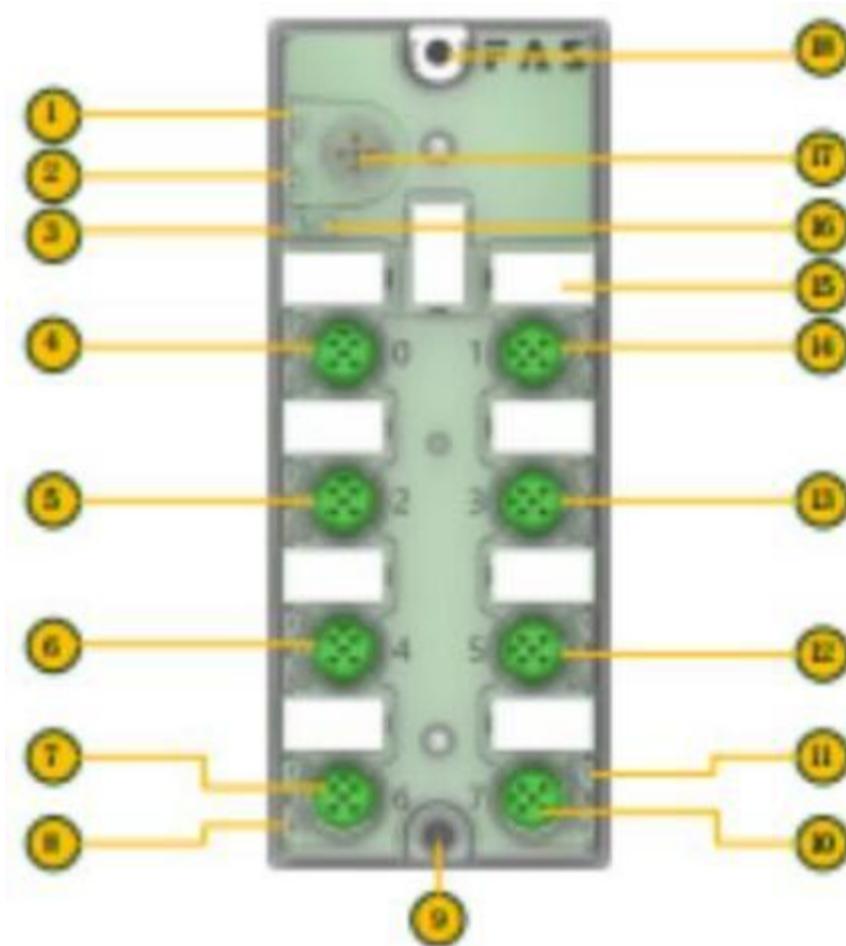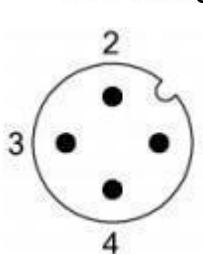

Figure 1

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.A coding, male
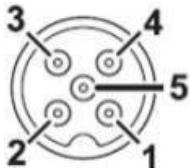
pin	Illustrate
1	Power supply, +24V
2	NC
3	GND
4	C/Q, IO-Link data transfer channel

Figure 2

3. Digital Port Connection Diagram

As shown in Figure 3.

M12.A coding, female

pin	Function
1	Power 24V
2	Digital input
3	Power GND
4	Digital input
5	FE

Figure 3

4. 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 byte input

4.2 Process data/input data

As shown in Figure 4.

	0								1							
bit	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Describe	input port 7 Pin4	input port 6 Pin4	input port 5 Pin4	input port 4 Pin4	input port 3 Pin4	input port 2 Pin4	input port 1 Pin4	input port 0 Pin4	input port 7 Pin2	input port 6 Pin2	input port 5 Pin2	input port 4 Pin2	input port 3 Pin2	input port 2 Pin2	input port 1 Pin2	input port 0 Pin2

Figure 4

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

4.3 Process data/output data

None

4.4 Parameter data/request data

As shown in Figure 5.

	DPP Index	SPDU Index	Subindex	Object name	length	Scope	Defaults
Identification data				Supplier ID	2	Read only	0x0454
				Device ID	3		0x0994C6
		0x10	0	Supplier name	19		FAS(Fujian)Co.,LTD
		0x11	0	Supplier text	16		www.fas-elec.com
		0x12	0	Product name	13		FNI IOL-134-000-M12
		0x13	0	Product ID	5		00B831
		0x14	0	Product text	44		IO-Link M12 PNP 16_DI
		0x16	0	Hardware version	3		20211010
		0x17	0	Firmware version	3		2.01
Parameter data		0x40	0	Bit inversio n	2	0000-FFFF	0x0000

Figure 6

Note:

0x40 Set bit reverse: 0-bit is not reversed, 1-bit is reversed, such as external input is 0x0000, when 0x40 is 0x0000

4.5 Mistake

As shown in Figure 6.

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

Figure 7

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			

Figure 8