

## FNI\_IOL-709-000-M12 manual

### 1. Connection diagram

As shown in Figure 1.

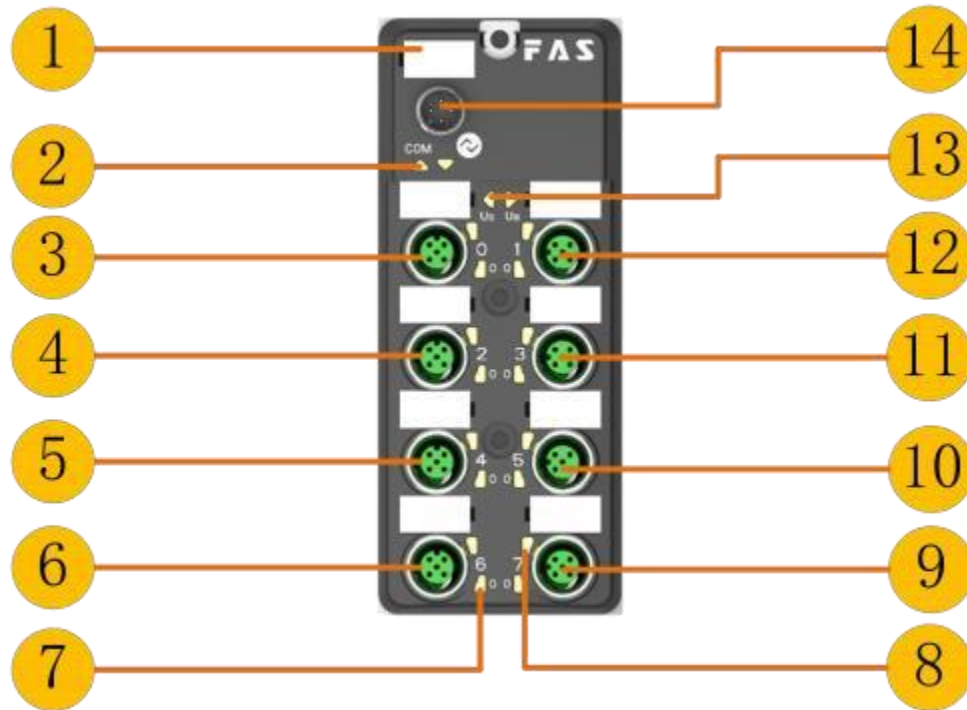


Figure 1

1 Label

2 Status LED : IO-Link

3 Analog input port 0

4 Analog input port 2

5 Digital Input Port 4

6 Digital input ports 6

7 Status LED : Digital input port 6 Pin4

8 Status LED : Digital Input Port 7 Pin2

9 Digital Input Port 7

10 Digital input port 5

11 Analog input port 3

12 Analog input port 1

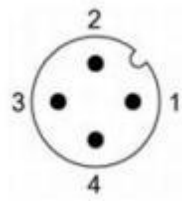
13 Status LED : Power

14 IO-Link interface

## 2. IO-Link interface diagram

As shown in Figure 2.

**M12. A coding, male**



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

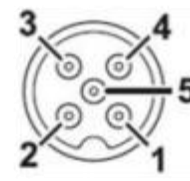
Figure 2

## 3. Analog input port connection diagram

As shown in Figure 3.

**M12. A coding, female**

M12, A类, 母头



Pin	Function
1	Max 350mA, 24V
2	NC
3	OV, GND
4	Analog input
5	FE

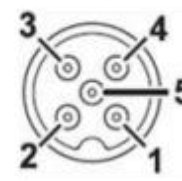
Figure 3

## 4. Digital Input Port Connection Diagram

As shown in Figure 4.

**M12. A coding, female**

M12, A类, 母头



Pin	Function
1	Max 350mA, 24V
2	Digital input
3	OV, GND
4	Digital input
5	FE

Figure 4

## 5. IO-Link data

### 5.1 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	5ms
Process data cycle time	5 ms, Consistent with minimum cycle time
Process data length	10 byte input

## 5.2 Process data/input data

As shown in Figure 5.

Note: 0 is MSB, 9 is LSB.

	0								1								2								3							
Bit	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Describe	Analog input port																Analog input port															
	0								1								2								3							
Bit	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Describe	Analog input port																Analog input port															

	8								9							
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 7 Pin2	Input port 6 Pin2	Input port 5 Pin2	Input port 4 Pin2	Reserved							

Figure 5

## 5.3 Parameter data/request data

As shown in Figure 6.

	DPP	SPDU		Object name	length	Scope	Defaults
	Index	Index	Subindex				
				Supplier ID	2		0x0454
				Device ID	3		0x0995E2
Identification data	Id	0x10	0	Supplier name	19	Read only	FAS(Fujian) Co., LTD
		0x11	0	Supplier text	16		www.fas-elec.com
		0x12	0	Product name	MAX 64		FNI IOL-709-000-M12
		0x13	0	Product ID	MAX 32		00BA11
		0x14	0	Product text	44		IO-Link M12 4AI 8DI 4...20V
		0x16	0	Hardware version	3		20200909
Parameter data		0x17	0	Firmware version	3		2.01
		0x40	0	Bit reversal	1	00-FF	0x00

Figure 6

## 5.5 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

Figure 7

## 5.6 Event

As shown in Figure 8.

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