



PRODUCT

USE INSTRUCTIONS



Ordering code: 00BS15

Part number: FNI IOL-106-002-K20

Type: 16xDO

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Security

■ Expected use

This manual describes as decentralized input and output modules for connecting to an industrial network.

■ Installation and start-up

Precautions!

Installation and start-up may only be performed by trained personnel. A qualified individual is one who is familiar with the installation and operation of the product and has the necessary qualifications to perform such operations. Any damage caused by unauthorized operation or illegal and improper use is not covered by the manufacturer's warranty. The equipment operator is responsible for ensuring that appropriate safety and accident prevention regulations are observed.

■ Corrosion resistance

Precautions!

FNI modules generally have good chemical and oil resistance. When used in corrosive media (e.g. high concentrations of chemicals, oils, lubricants, coolants and other material media (i.e. very low water content), these media must be checked before the corresponding application material compatibility. If a module fails or is damaged due to this corrosive medium, a defect claim cannot be made.

■ Dangerous voltage

Precautions!

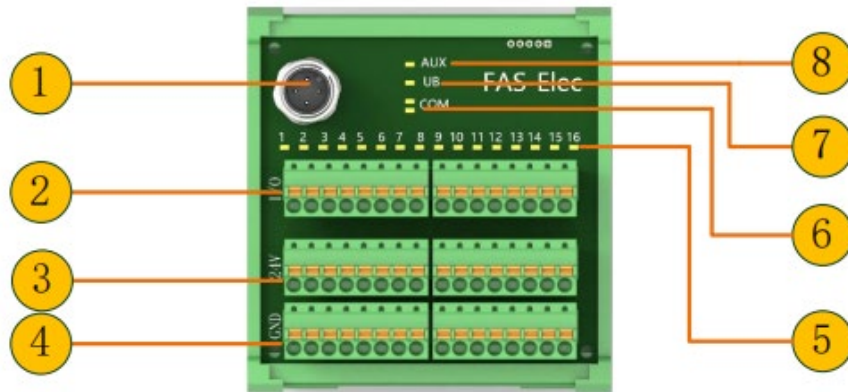
Disconnect all power before using the device!

■ General security

Debugging and inspection	Trouble	Owner/operator obligations	Expected use
Before debugging, read the user manual carefully.	If the defect or equipment failure cannot be corrected, the operation of the equipment must be stopped to avoid damage that may be caused by unauthorized use.	This equipment is an EMC Class A compliant product. This device produces RF noise.	The warranty and limited liability statement provided by the manufacturer does not cover damage caused by: ·Unauthorized tampering ·Improper use operation ·The instructions provided in the user manual explain the use, installation and handling of discrepancies
This system cannot be used in an environment where the safety of personnel depends on the functionality of the equipment.	Only after the housing is fully installed can the intended use be assured.	The owner/operator must take appropriate precautions to use this equipment. This device can only use the power supply that matches this device, and can only connect cables approved for application.	

1. Component function description

1.1 Overall introduction to the module

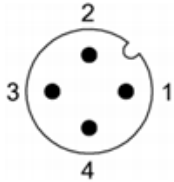


1	2	3	4
IO-Link interface	Digital I/O terminal blocks	24V terminal block	GND terminal block
5	6	7	8
Status LED: Digital I/O Point 16	Status LED:IO-Link	Status LED: Power	Status LED: Actuator

2.Interface definition

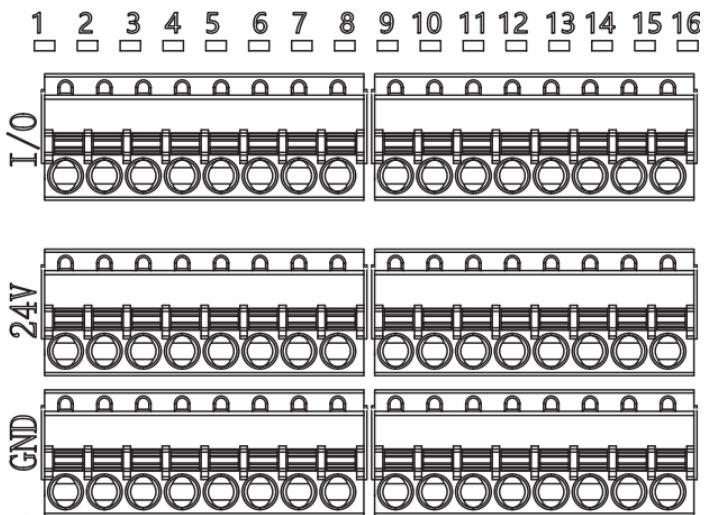
2.1 IO-Link Interface (M12 A-coded)

M12,A-Coded, Male



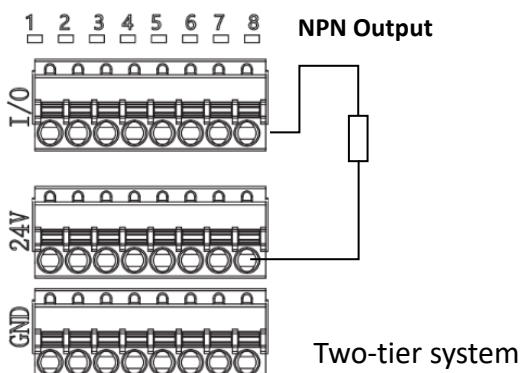
Pin	Illustrate
1	Power supply, +24V (<1.1A)
2	Actuator power supply, +24V (<2A)
3	GND
4	C/Q, IO-Link data transmission channel

2.2 Signal port (screwless spring terminal)



Illustrate:

1. Output signal type support: second-wire NPN, dry contact;
2. Pin +24V, single output power supply, maximum load 400mA. The total module current is <2A;
3. The total current of each 8 channels (1-8, 9-16) is <1A;

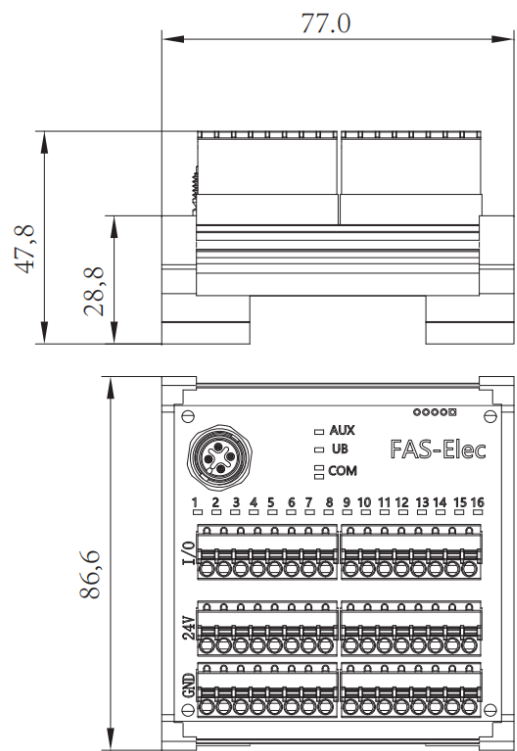


2.3 Status LED meter

State LED	State	Describe
UA	Steady green	Auxiliary power supply is normal
	Destroy	Auxiliary power supply abnormality
US	Steady green	Module power supply is normal
	Destroy	Module is not powered
COM (Up)	Red light always on	The module is configured with an output point and the UA power supply is not connected.
	Red light flashes quickly	UA power supply voltage is too high (>DC 30V)
	Red light flashes slowly	UA power supply voltage is too low (<DC 18V)
COM (Down)	Green intermittent slow flash	Communication abnormality
	Green flashes intermittently quickly	Communication is normal
	Destroy	No communication
1~16 signal	Yellow light always on	Digital signal output is valid
	Destroy	Digital signal output is invalid

2.4 Mechanical dimensions

Project	Specification
Dimensions (Width x Height x Depth)	77MMx86.6MMx47.8MM



3.IO-Link data

3.1 Communication parameters

Data transmission baud rate	COM2 (38.4kbit/s)
Minimum cycle time	3ms
Process data cycle time	3ms,corresponds to the minimum cycle time
Process data length	2 bytes output

3.2 Process data

3.2.1 Process data/input data

Byte	0								1							
Bit	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Pin	Port 8	Port 7	Port 6	Port 5	Port 4	Port 3	Port 2	Port 1	Port 16	Port 15	Port 14	Port 13	Port 12	Port 11	Port 10	Port 9

3.3 Service data

	DPP	SPDU		length	Scope	Default value
	Index	Index	Subindex			
Identification data				2		0x0454
				3		0x099CE4
		0x10	0	19	Read only	FAS(Fujian)Co.,LTD
		0x11	0	16		www.fas-elec.com
		0x12	0	13		FNI IOL-106-002-K20
		0x13	0	6		00BS15
		0x14	0	44		IO-Link IP20 NPN 16DO
		0x16	0	8		20201028
		0x17	0	4		2.0

3.4 Error code

Error code	Additional code
Device application error 0x80	Index not available 0x11
	Subindex not available 0x12
	Value out of range 0x30

3.5 Event

Class/qualifier			Code (high + low)			
Model	Type	Example				
Device hardware	Powered by	Power supply low voltage	U2=Power supply +24V	Device hardware	Powered by	Power supply low voltage
0xC0	0x30	0x03	0x5000	0x0100	0x0010	0x0002
0xF3			0x5112			
Disappear	Mistake	AL	Device hardware	Powered by	Power supply low voltage	U2=Power supply +24V
0x80	0x30	0x03	0x5000	0x0100	0x0010	0x0002
0xB3			0x5112			
Appear	Mistake	AL	Device hardware	Powered by	Power supply for peripherals	
0xC0	0x30	0x03	0x5000	0x0100	0x0060	
0xF3			0x5160			
Disappear	Mistake	AL	Device hardware	Powered by	Power supply for peripherals	
0x80	0x30	0x03	0x5000	0x0100	0x0060	
0xB3			0x5160			

■ High Quality Product / Sincere Service



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