

PRODUCT

USE INSTRUCTIONS



Ordering code: 00BS14

Part number: FNI IOL-106-006-K20

Type: 32xDO

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? 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!

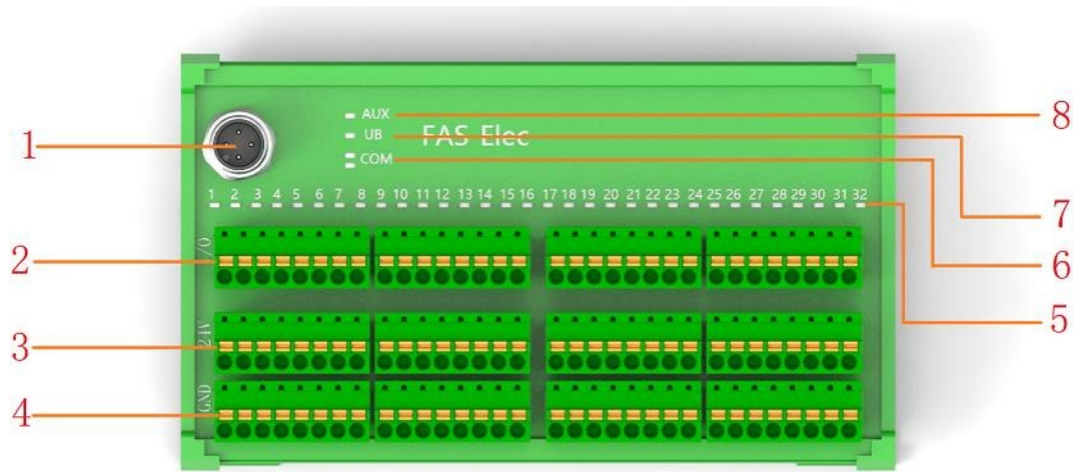
Disconnect all power before using the device!

■ General security

Debugging and inspection	Fault	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 Module Overview

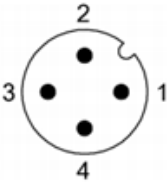


1	2	3	4
I0-Link interface	Digital I/O Terminal Blocks	24V Terminal Block	GND Terminal Block
5	6	7	8
Signal status LED	COM Status LED	System power status LED	Actuator power status LED

2.Interface Definition

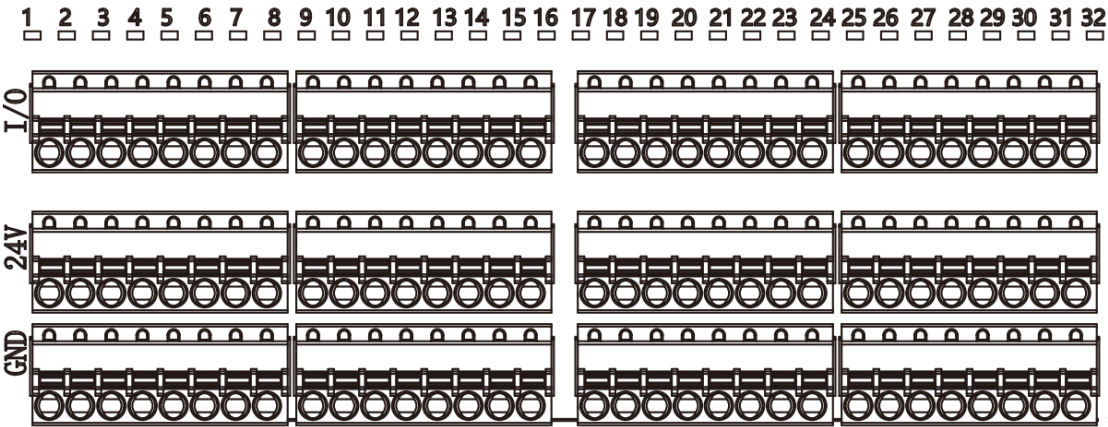
2.1 IO-Link Interface (M12 A-coded)

M12,A type,Male



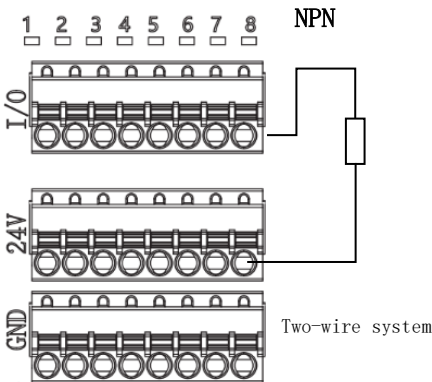
Pin	Illustrate
1	Power supply, +24V (<1.1A)
2	Actuator power supply, +24V (<2A)
3	GND
4	C / Q, IO-Link data transmission channel

2.2 Signal port (screw-free spring-type terminal block)



illustrate:

1. Input signal types supported: three-wire NPN, two-wire NPN, dry contact;
2. Pin +24V, single output power supply maximum load 350mA;
3. Total current of each 8 channels (1-8, 9-16, 17-24, 25-32) <1A;

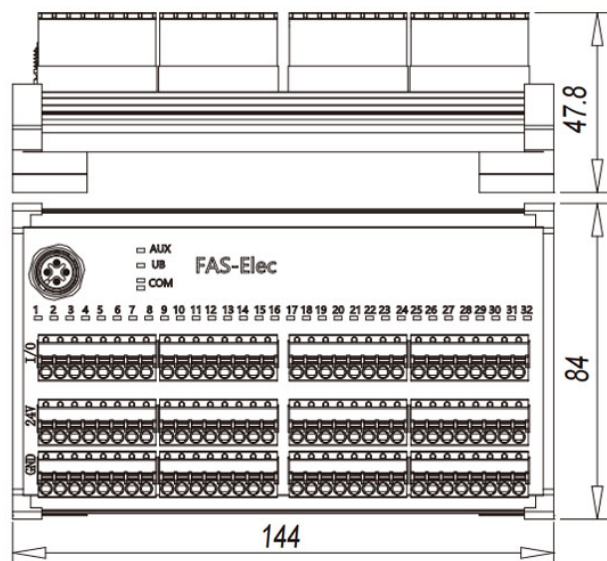


2.3 Status LED Table

Status LED	Status	Description
UA	Green light is always on	Auxiliary power supply is normal
	Destroy	Auxiliary power supply abnormality
US	Green light is always on	Module power supply is normal
	Destroy	Module not powered
COM (Up)	Red light is always on	Module configured with output points and UA power not on
	Red light flashing fast	UA supply voltage too high (>DC 30V)
	Red light flashing slowly	UA supply voltage too low (<DC 18V)
COM (Down)	Green flashes intermittently slowly	Communications anomaly
	Green flashes intermittently quickly	Communication is normal.
	Destroy	Without communication
1~32 signal	Yellow light is always on	Digital signal output valid
	Destroy	Digital signal output invalid

2.4 Mechanical dimensions

Project	Specification
Dimensions (Width x Height x Depth)	144MMx84MMx47.8MM



3. IO-Link data

3.1 Communication parameters

Baud rate for data transmission	COM2 (38.4kbit/s)
Minimum cycle time	3ms
Process data cycle time	3ms, consistent with minimum cycle time
Process data length	4 bytes output

3.2 Process data

3.2.1 Process data/output data

(byte)	0								1							
(bit)	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Pin	P o r t 8	P o r t 7	P o r t 6	P o r t 5	P o r t 4	P o r t 3	P o r t 2	P o r t 1	P o r t 1 6	P o r t 5	P o r t 4	P o r t 3	P o r t 2	P o r t 1	P o r t 0	P o r t 9
(byte)	2								3							
(bit)	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Pin	P o r t 2 4	P o r t 2 3	P o r t 2 2	P o r t 2 1	P o r t 2 0	P o r t 1 9	P o r t 1 8	P o r t 1 7	P o r t 3 2	P o r t 3 1	P o r t 3 0	P o r t 2 9	P o r t 2 8	P o r t 2 7	P o r t 2 6	P o r t 2 5

3.3 Service data

	DPP	SPDU		Object name	length	Scope	Defaults
	Index	Index	Subindex				
Identifying data				Supplier ID	2		0x0454
				Device ID	3		0x099CE9
		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-106-006-K20
		0x13	0	Product ID	6		00BS14
		0x14	0	Product text	44		IO-Link IP20 NPN 32DO
		0x16	0	Hardware version	8		20200615
		0x17	0	Firmware version	4		2.00

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

Classes/qualifiers			Code (high + low)			
Mode	Type	Example				
Appear	Mistake	AL	Device hardware	Powered by	Power supply low voltage	U2=Power supply +24V
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			
Disappear	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



경기도 성남시 중원구 사기막골로 124

SKn 테크노파크 메가동 303 호

E-mail: sales@creken.com www.creken.com



FAS / Factory Automation Solution
No. 33 Liuqiao Road, Shangjie Town,
Minhou County, Fujian Province
www.faselec.com