

FDNP-XSG16-ST



The **FDNP-XSG16-ST** station is designed to be mounted directly on motor control enclosures. Once mounted, the I/O, power and DeviceNet™ signals are available both inside the enclosure and outside the enclosure. Inside the enclosure the signals are accessed via removable screw terminals on the back of the station. Outside the enclosure the signals are accessed via *euromast*® or *minifast*® connectors on the front of the station.

This station provides a connection for up to sixteen I/O points. There are two I/O points per connector. Each connector can support two inputs and two outputs, or one input and one output. This extremely flexible station can have any mixture of inputs and outputs.

To use an I/O point as an input, simply leave the corresponding output OFF. The I/O point LED will turn green to indicate that the sensor is ON.

To use an I/O point as an output, simply turn on the corresponding output bit. The output will switch high and the I/O LED will turn green. Note that this will in turn cause the corresponding input bit to turn on. If the corresponding input does not turn on, the output is shorted.

Because the inputs and outputs are powered off the same circuit, this station is not recommended for E-stop controlled outputs.

The node address can be set using the rotary switches located under the device cover or through software node commissioning. The unit automatically detects the communication rate.

The **FDNP-XSG-ST** supports explicit messaging, poll, change of state, and cyclic I/O messages. These connections are established through UCMM or predefined master/slave connection set.

FDNP-XSG16-ST

- Inside/Outside enclosure DeviceNet™ station
- Extremely Flexible DeviceNet™ station
- Sixteen Inputs or Outputs

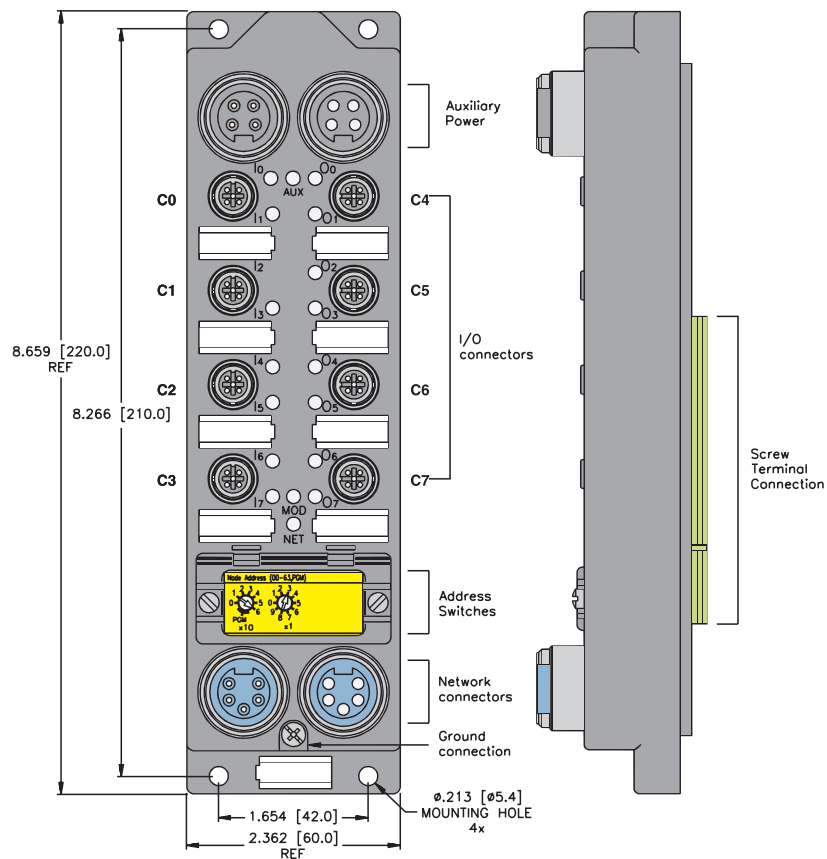
Applications

- For small motor starter enclosures
- Ideal anywhere small enclosure I/O counts are needed

Features

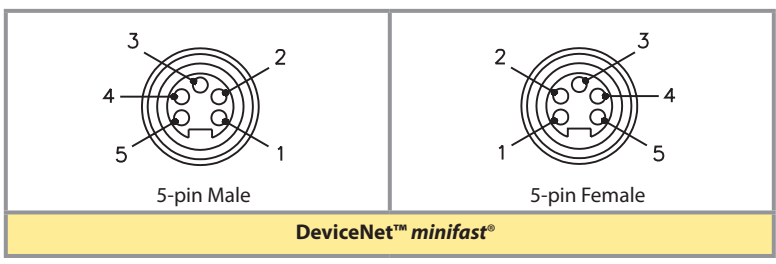
- Provides I/O, Power and DeviceNet on removable screw terminals inside the enclosure
- Sensors can be connected directly to the front of the station
- PNP short-circuit protected inputs
- 0.5 Amp short-circuit protected outputs

Dimensions

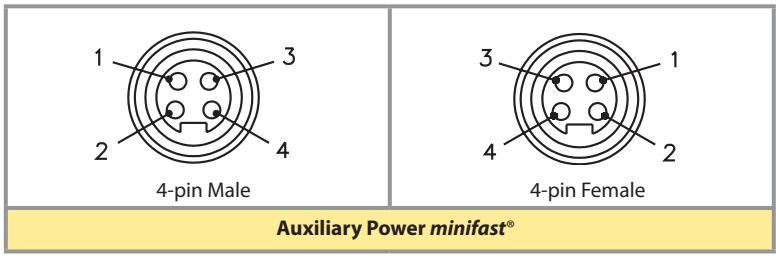


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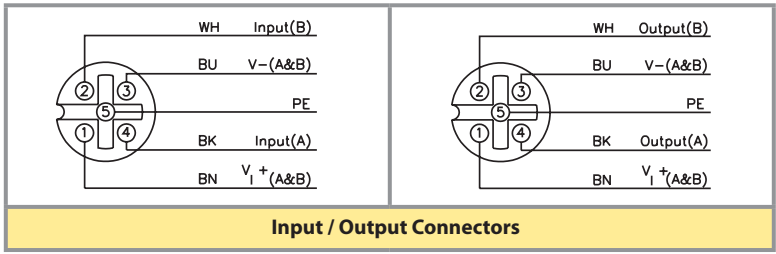
Connectors



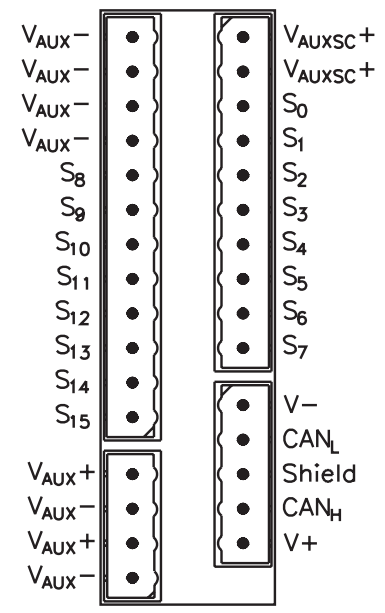
- 1 = Shield
- 2 = V +
- 3 = V -
- 4 = CAN_H
- 5 = CAN_L



- 1 = V_{AUX} +
- 2 = Pass thru
- 3 = Pass thru
- 4 = V_{AUX} -



Removable Screw Terminals



I/O Data Mapping

Input Data	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	I-7	I-6	I-5	I-4	I-3	I-2	I-1	I-0
1	I-15	I-14	I-13	I-12	I-11	I-10	I-9	I-8	
2	IGS	OGS	-	-	-	-	-	-	

Output Data	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	O-7	O-6	O-5	O-4	O-3	O-2	O-1	O-0
1	O-15	O-14	O-13	O-12	O-11	O-10	O-9	O-8	

Because the inputs and outputs are powered off the same circuit, this station is not recommended for E-Stop controlled outputs.

Abbreviations

- I = Input Data (0=OFF, 1=ON)
- O = Output Data (0=OFF, 1=ON)
- OGS = Output Group Status (0=Working, 1=Fault)
- IGS = Input Group Status (0=Working, 1=Fault)

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Module Specifications

Supply Voltage

Bus power	11-26 VDC, powers communication
Internal current consumption	<75mA (from bus power)
Auxiliary power	18-26 VDC, optically isolated, powers all I/O

Input Circuits

(16) PNP 3-wire sensors or dry contacts

Input voltage (V+)	13-26 VDC (from auxiliary power)
Input Short-circuit (V+)	<700 mA (total, short-circuit protected)
Input signal current (Input)	OFF <2mA ON 3.0-3.4 mA at 24VDC
Input delay	2.5 ms

Output Circuits

(16) DC actuators

Output voltage	18-26 VDC (from auxiliary power)
Output load current	0.5 A
Maximum switching frequency	100 HZ

I/O LED Indications

Off=Off
Green=On

Module Status LED

Green: working properly
Flashing green: detecting autobaud rate
Flashing red: I/O short-circuit

Network Status LED

Green: established connection
Flashing Green: ready for connection
Flashing red: connection time-out
Red: connection not possible

Adjustments

via Rotary Switch

Address	0-63
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Housing

Material	glass filled nylon with nickel plated brass connectors
Enclosure	NEMA 1,3,4,12,13 and IEC IP 67
Operating temperature	-40° to 70°C (-40° to 158°F)

Compliances

CSA, CE, ODVA