FDNP-XSG16-TT

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 or 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 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-XSG16-TT supports explicit messaging, polled, change of state, and cyclic I/O messages. These connections are established through UCMM or predefined master/ slave connection set.

Recommended Cordsets:

Bus line:	RSM RKM 579-*M
Auxiliary power:	RSM RKM 47-*M
Inputs / Outputs:	VBRS 4.4-2RK 4T-*/* or RK 4.4T-*-RS 4.4T

FDNP-XSG16-TT

- Extemely flexible DeviceNet™ station
- 16 inputs or outputs

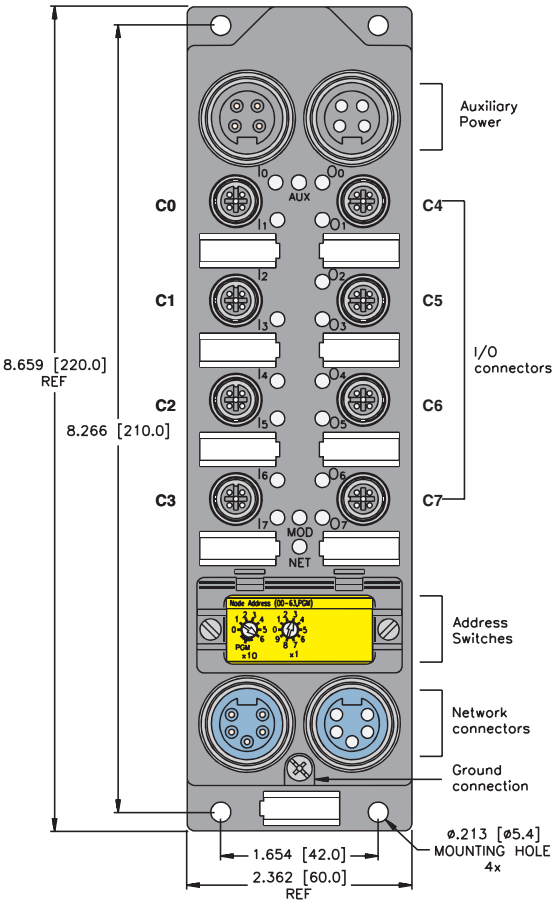
Applications

- For wet or dry environments
- For use with sixteen 3-wire proximity and photoelectric sensors or 16 discrete actuators

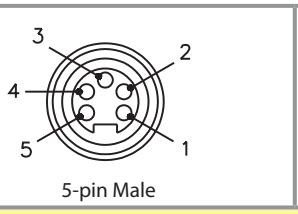
Features

- PNP short-circuit protected inputs
- 0.5 amp short-circuit protected outputs
- Glass filled nylon with nickel plated brass connectors
- Rotary address switches

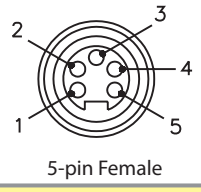
Dimensions



Connectors



5-pin Male



5-pin Female

DeviceNet™ *minifast*®

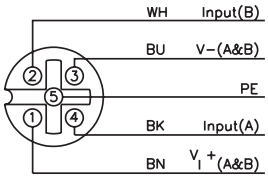
1 = Shield
2 = V +
3 = V –
4 = CAN_H
5 = CAN_L

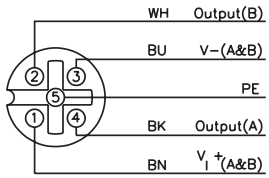
4-pin Male

4-pin Female

Auxiliary Power *minifast*®

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





Input / Output Connectors

I/O Data Mapping

Item Number F0129
Product Type / Code: 7/2065

	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Input Data	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

Abbreviations

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

Module Specifications

Supply Voltage	
Bus Power	11-26 VDC
Internal Current Consumption	<75 mA (from bus power)
Auxiliary Power	18-26 VDC
Input Circuits	(8) PNP 3-wire sensors or dry contacts
Input Voltage (V+)	13-26 VDC (from auxiliary power)
Input Short-Circuit (V+)	700 mA (total)
Input Signal Current (I)	OFF <2 mA ON 3.0-3.4 mA at 24 VDC
Input Delay	2.5 ms
Output Circuits	
Output Voltage	18-26 VDC (from auxiliary power)
Output Load Current	0.5 A per output (from auxiliary power)
Open Circuit Current	<1mA per output
Maximum Switching Frequency	100 Hz
I/O LED Indications	
	Off = Not active Green = Active
Module Status LED	
	Off = Power off Green = Operating Flashing Green = Autobaud Flashing Red = I/O Short
Network Status LED	
	Off = No connection Green = Established connection Flashing green = Ready for connection Flashing red = Connection time-out Red = Connection not possible
Auxiliary Power Status LED	
	Off = Power off Green = Power on
Address	
	0-63 Address from internal EEPROM (rotary switch must be in PGM position
Housing (mm)	220 x 60 x 40 (H x W x D)
Material	Glass-filled nylon, nickel plated brass connectors
Enclosure	NEMA 1, 3, 4, 6, 6P, 12, 14 and IEC IP67, IP68, and IP69K
Operating Temperature	-40° to +70°C (-40° to 158° F)