# FDN20-16XSG





This station provides a connection for 16 I/O points. All pointa can be either inputs or outputs. All inputs and outputa are isolated from DeviceNet. To use an I/O point as an input, simply leave the corresponding output bit off. To use an I/O point as an output, simply turn on the corresponding output bit. The output will switch on high. 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.

The FND20-16XSG supports explicit messaging, poll, change of state, and cyclic I/O messages. These connections are established through UCMM or predefined master/slave connection set.

### **Integrated Design:**

- Extremely Flexible DeviceNet<sup>™</sup> Station
- Sixteen Inputs/Outputs

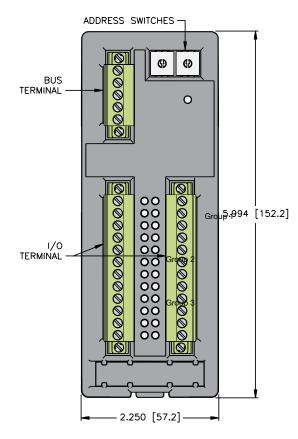
## **Application:**

- For Use with 0.5 Amp Outputs
- For Use with PNP Sensors

### **Features:**

- Short-Circuit Protected Outputs
- All of the I/O is Isolated from DeviceNet
- All of the I/O may be powered by DeviceNet

### **Dimensions:**



## FDN20-16XSG



### **Module Specifications:**

#### **Supply Voltage**

11-26 VDC **Bus Power** 

≤75 mA Plus Sum of Sensor and Output Currents Internal Current Consumption

(From Bus Power)

**Input Circuits** 16 PNP 3-wire sensors or dry contacts

Input Voltage (V+) 11-26 VDC (From Bus Power)

Input Short-Circuit (V+) <700 mA (Total, Short-Circuit Protected)

Input Signal State OFF 0-4 V, 0-0.5 mA

ON 8-24 VDC, 1-3.4 mA

Input Delay 1 ms

**Output Circuits** (16) DC Actuators

Output Voltage 18-26 VDC (From Aux Power)

**Output Load Current** 0.5 Amps Each (From Aux Power) 6.4 A total current

Maximum Switching Frequency 100 Hz

**Address Switch** 

0-63: Address from switches

64-79: Address from EEPROM

80-99: Reserved

**Network Status LED** 

Green **Established Connection** Flashing Green: Ready for Connection Flashing Red: Connecton Time-Out Red: Connection Not Possible **Detecting Baud Rate** 

Flashing Amber:

Housing

Material Nylon Enclosure IP 20

-40° to +70°C (-40° to +158°F) Operating Temperature

Relative Humidity Non-condensing

# I/O Data Mapping:

#### Product Type/Code:

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

#### **Abbreviations:**

Input Data (0 = OFF, 1 = ON)

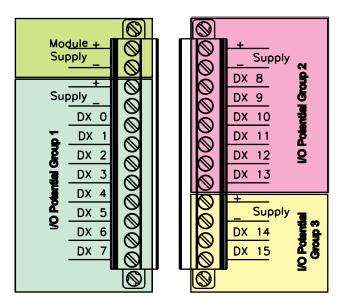
Output Data (0 = OFF, 1 = ON)

IGS = Input Group Status (0 = Working, 1 = Fault)

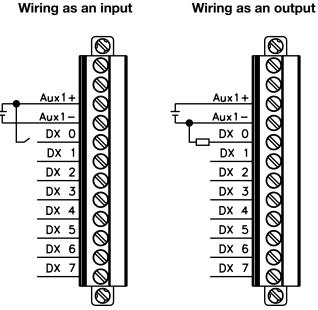
**OGS** = Output Group Status (0 = Working, 1 = Fault)



I/O Connections



Wiring as an input



# Example of how to supply I/O points via DeviceNet power

