

Digital Input Module

DIMS-8 / DIMS-16

8 / 16 Channels
 DIN-Rail Mount
 MODBUS over Serial

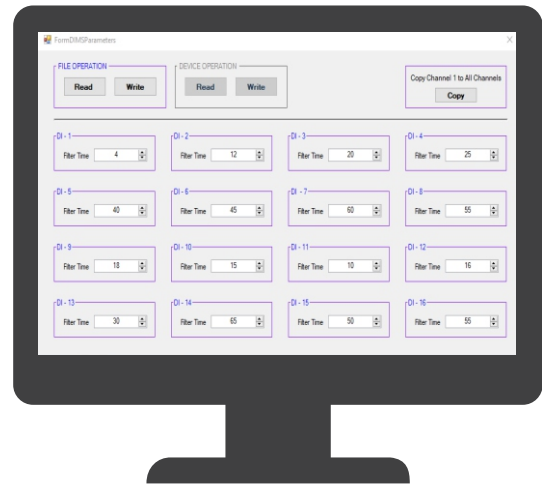
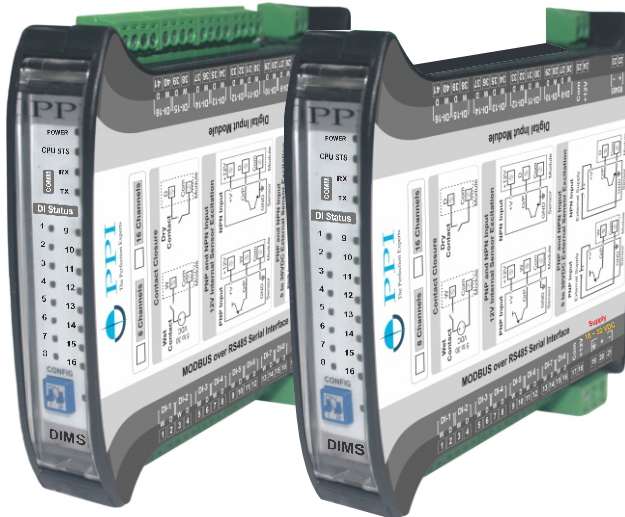
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DIMS-16

DIMS-8

Configuration Tool



Salient Features

- 8 (DIMS-8) or 16 (DIMS-16) Digital Input Channels
- Input Types Supported
 - Dry (Potential-free) Open/Close Contact
 - High/Low Voltage Levels
 - PNP & NPN Sensor with +12VDC Internal Excitation
 - PNP & NPN Sensor with 5 to 30VDC External Excitation
- Independent Programmable Filter Time Constant for each Input
- Monitors Instantaneous High/Low Input Status
- Monitors Latched Low to High & High to Low Transition Status
- Supports Discrete Coil (Bits) & Input Register (Bit-Mapped) Modbus Data Type for Status Reading
- 2-wire, Half-Duplex, Start-Stop Synchronized, Isolated RS485 Serial Port.
- Industry Standard Modbus RTU Protocol with Programmable Slave ID, Baud Rate & Parity
- Compact DIN-Rail Mount Enclosure : 22.5(W) X 101(H) X 119(D), mm
- Wide Supply Voltage Range : 18 ~ 32 VDC (24 VDC Nominal)

General Information

Product Type	8 / 16 Channel DIN-Rail Digital Input Module MODBUS over RS485 Serial Interface
Ordering Code	DIMS-8, 8 Channel Module DIMS-16, 16 Channel Module
Quantity	1 Unit
Accessories	(Optional) USB to RS485 Converter
Similar Modules	AIMS-4X, AIMS-8X AOMS-4U, AOMS-8U DOMS-12

Digital Input Module

Channel Specifications

Number of Channels	8 / 16	
Input Types	<ul style="list-style-type: none"> • Dry (Potential-free) Open/Close Contact • High/Low Voltage Levels • PNP & NPN Sensor with +12 VDC Internal Excitation • PNP & NPN Sensor with 5 to 30 VDC External Excitation 	
Input Logic Levels	<ul style="list-style-type: none"> • Dry Contact : Logic Low : Open • Voltage Level : Logic Low : 2 VDC max • NPN/PLC Sensor : Logic Low : Transistor Off-State 	<ul style="list-style-type: none"> Logic High : Close to Ground Logic High : 5 to 30 VDC Logic High : Transistor On-State
Filter Time Constant	Programmable from 1 to 30000 mS. <i>A 'Low to High' or 'High to Low' state change is registered if the changed state persists for at least the set Filter Time Constant. This helps in suppressing noise.</i>	
Isolation	Three-way Isolation Eliminates Potential Ground Loops between Power, Inputs & RS485 Serial Port 1500VAC for 1 second or 250VAC continuous	

Serial Communication

Port	RS485, 2-wire, Half Duplex, Start-Stop Synchronized
Protocol	MODBUS RTU
Baud Rate	Settable : 2400, 4800, 9600, 19200, 38400
Parity	Settable : None, Even, Odd
Max. Units per Loop	31
Max. Distance	1200 Meters

Power Supply

Type	Switch Mode (SMPS)
Power Requirement	18 ~ 32 VDC, nominal 24 VDC @ 300mA Max. Note : In case of looping multiple modules on one power source, make sure that the power source is capable of supplying minimum 300mA current per module.
Consumption	7 VA Max @ 24 VDC

Physical

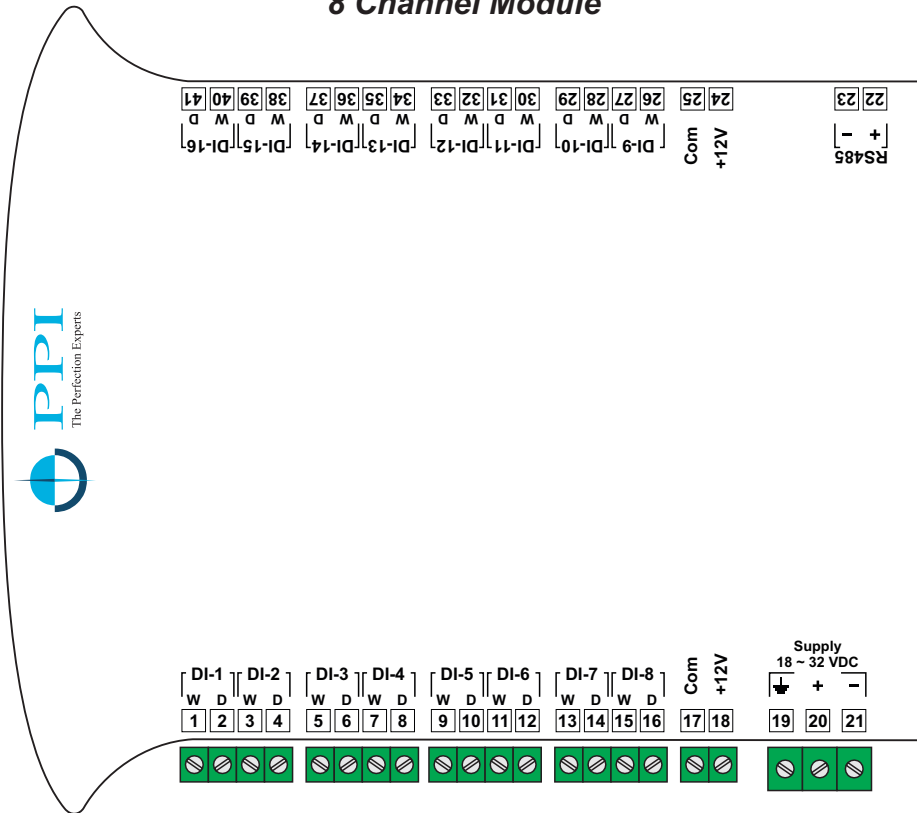
Mounting	DIN-Rail
Overall Dimensions	22.5(W) X 101(H) X 119(D), mm
Terminals	Screw Type, Pluggable
Weight	400 gm, Appx.

Environmental

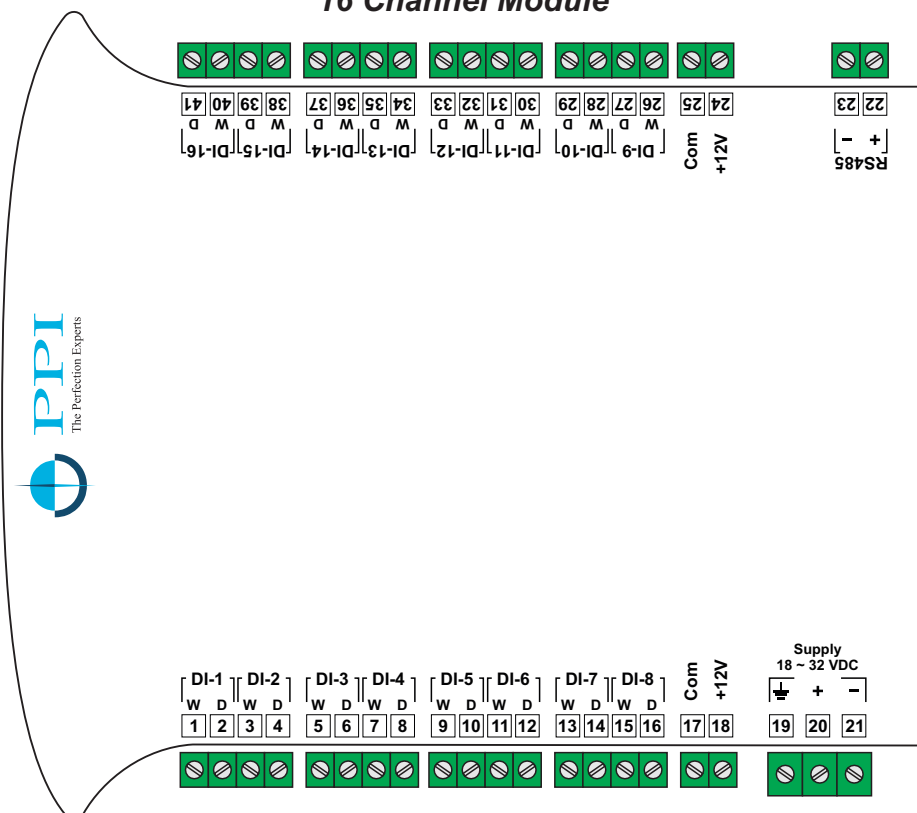
Operating Ambient	0 to 55°C & 5 to 90%RH Non-condensing
Storage Temperature	-10 to +70°C
Atmospheres	Not Suitable for use in Corrosive or Explosive Atmospheres. The Panel in which the Instrument is Mounted must be free of Electrically Conductive Pollution.

Terminations

8 Channel Module



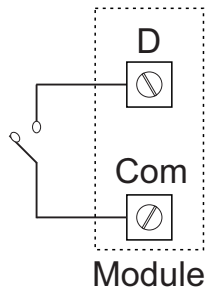
16 Channel Module



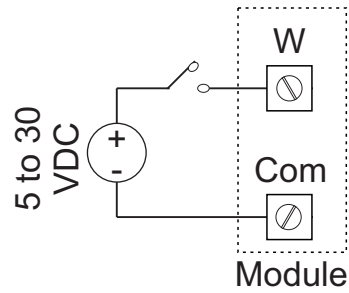
Digital Input Module

Electrical Connections

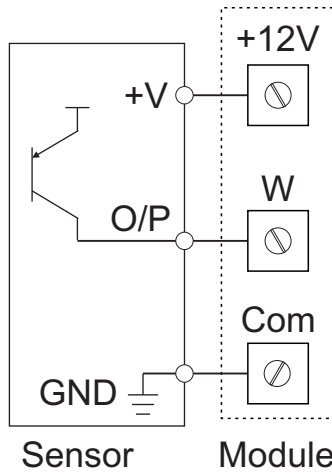
Dry Contact



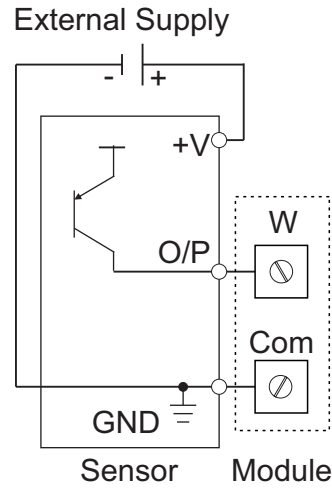
Voltage Level



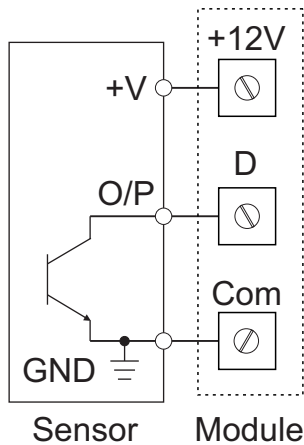
PNP Input
(12V Internal Sensor Excitation)



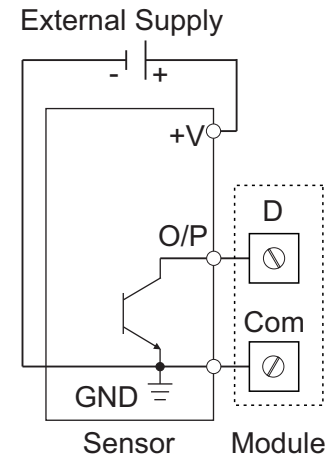
PNP Input
(5 to 30VDC External Sensor Excitation)



NPN Input
(12V Internal Sensor Excitation)



NPN Input
(5 to 30VDC External Sensor Excitation)



Process Precision Instruments (An ISO 9001 : 2008 Company)

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