

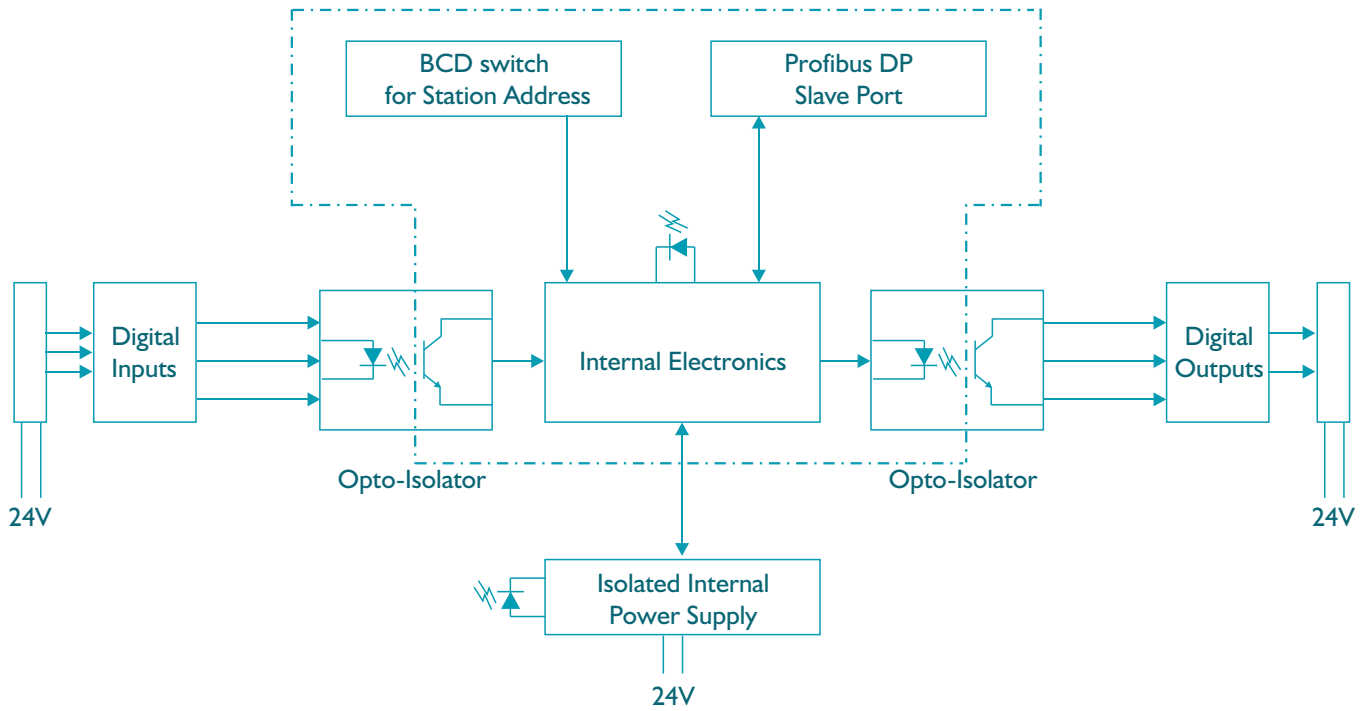


Profibus I/O Module

Features :

- Low cost compact Profibus Digital I/O module with DIN rail mounting
- Pluggable terminal block for Profibus communication
- User definable Station ID through DIP Switches
- High Speed Profibus DP Slave communication
- LED indication for each Input and Output , Communication and Power ON
- No configuration software required
- Isolation between I/O and Comm port, I/O and Power Supply
- Short circuit protection for Output

Block Diagram



Basic Operations

Function

The FIOD-PDP adds digital capability to PLC / SCADA system on Profibus network. It functions as a Profibus DP Slave in the network.

The unit offers 16 digital inputs and 16 digital outputs. The digital inputs and outputs are isolated from the host device. The module has one Profibus DP communication port to connect to host device.

Communication with Host

FIOD-PDP module supports Profibus DP Slave Protocol.

The unit supports automatic detection of baud Rate. 9.6k up to 12Mbps baud rate is supported.

The unit has convenient DIP switches to configure the Address in BCD format .

The unit supports FREEZE and SYNC compatibility. Station addresses up to 99 are possible in the unit.

DIP Switch Setting



Address is coded into BCD Format.
 X₁ Switch is for Units place of address.
 X₁₀ Switch is for Ten's place of address.

X ₁₀				X ₁				Station Address
8	4	2	1	8	4	2	1	
Off	Off	Off	Off	Off	Off	Off	On	01
--	--	--	--	--	--	--	--	--
Off	Off	On	Off	Off	Off	On	On	23
--	--	--	--	--	--	--	--	--
On	Off	Off	On	On	Off	Off	On	99

For example :-
 As shown in above table for address 99
 Positions 1 & 8 should be on from X₁ Switch.
 Positions 1 & 8 should be on from X₁₀ Switch.

Specifications

Power

Power	: 24V DC \pm 10%
Reverse Polarity Protection	: Yes
Power failure with stand time	: 20 ms
Communication Port	: Profibus DP
Power dissipation	: 2.5 W
Power Input	
From supply voltage	: Max.100 mA (Approx.)@24VDC

Digital Inputs -

Number of inputs	: 16
Number of Terminals	: 48 (3 terminals / input channel)
Type of Terminals	: Pluggable (3.81mm pitch)
Rated Input Voltage	: 24 VDC (Max is 30VDC)
Rated Input Current	: 5mA @ 24 VDC
Input Impedance	: 4.9 K
Logic '0' Voltage	: -30 to 5V
Logic '1' Voltage	: 13 to 30V
Input Response time	: 10mS

Digital Outputs (Transistor)

Number of outputs	: 16
Number of Terminals	: 32 (2 terminals / Output channel)
Type of Terminals	: Pluggable (3.81mm pitch)
Maximum Load current	: 500 mA
Voltage drop at ON	: 0.8V
Short circuit protection	: Yes
Switching frequency	: 100Hz (maximum)
Nominal Load	
Ohmic	: 48 E, 12 W
Lamp	: 12 W
Inductive	: 12 VA (12 H)

Isolation

Between channels and Internal	: Yes (Optical Isoation)
Between Power and Internal	: Yes (Inductive)

Profibus Baud rate (Autodetect)

	: 9.6k, 19.2k, 45.45k, 93.75k, 187.5 k, 500k, 1.5M, 3M, 6M, 12M bit/s
Bus Protocol	: Profibus-DP
FREEZE compatibility	: Yes
SNYC compatibility	: Yes
Diagnostic function	: Yes

GSD File

	: Supplied with the unit
BUS Address	: 0 - 99 Setting through DIP Switches

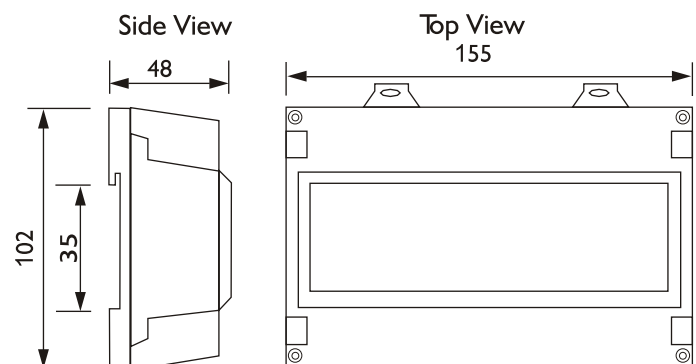
Temperature

Operating	: 0° to 60° C
Storage	: -20° to 80° C
Humidity	: 10% to 90% (Non condensing)
Mounting	: DIN rail mounting
Size	: 155 W x 102 H x 48 D mm
Immunity to ESD	: as per IEC61000-4-2
Immunity to Fast Transients	: as per IEC61000-4-4
Immunity to Radiated electromagnetic field	: as per IEC61000-4-3
Immunity to Conducted disturbances	: as per IEC61000-4-6
Surge	: as per IEC61000-4-5
Radiated emission	: as per EN61000-6-4

Models

Dimensions

Model	Inputs	Outputs
FIOD-PDP-1616-P	16	16



All dimensions are in mm



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