

DIGITAL PROCESS INDICATOR/LOGGER

DPI16S



Datalogging	0.8" Display for Process Value
Flame Proof	DNP3 Slave
Compact Size	MODBUS TCP/IP
Inbuilt Memory	RS485 MODBUS RTU

The Polmon DPI16S Digital Process Indicator/Logger is a compact and reliable solution designed to simplify process monitoring and data logging in critical industrial applications. Built for precision and safety, it supports multiple input types such as RTD, 4–20 mA, and 0–10 V, making it versatile for various process parameters. With advanced communication protocols including MODBUS RTU, MODBUS TCP/IP, and DNP3 Slave, the DPI16S ensures seamless integration into SCADA and control systems. Its flameproof, Zone1/Zone2 certified enclosure and magnetic key-based calibration make it ideal for hazardous environments, enabling safe and hassle-free configuration without opening the device. The DPI16S combines a bright 0.8" display, inbuilt memory for data logging, and robust security features to deliver dependable performance in reactor temperature monitoring, utility measurement, and other critical industrial processes.

Features

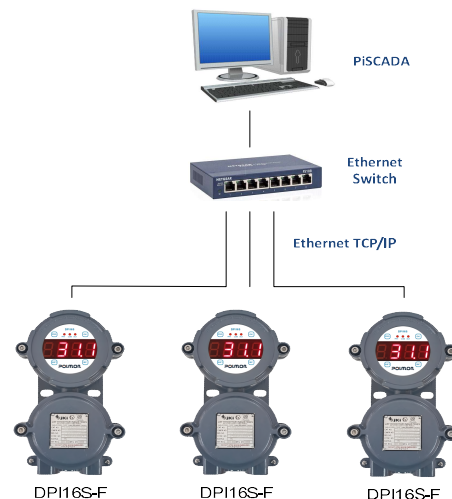
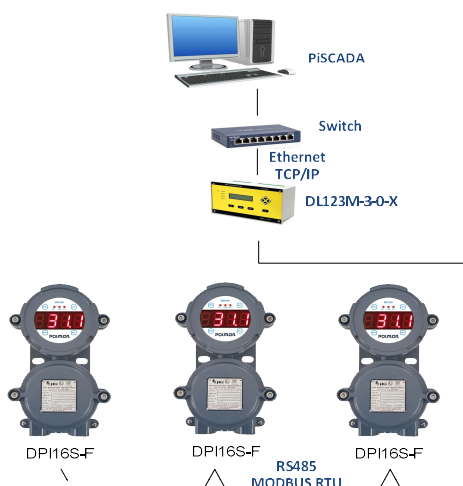
- 4-Digit 0.8" Seven Segment Display for PV
- Analog input types RTD / 4-20mA / 0-10V / 0-1V
- RS485 MODBUS RTU / MODBUS TCP/IP / DNP3-Ethernet / DNP3-RS485
- Inbuilt Memory for backfilling data and alarm events
- One Relay Output(optional)
- Flame Proof Enclosure for Zone1, Zone2 Gas Gr.IIA, IIB, IIC
- Password security to prevent unauthorized access (reconfigurable by user)

- User friendly local software Calibration for Analog Input
- Magnetic keys Operations eliminates frequent keypad maintenance problems
- True 3-wire RTD with lead wire compensation
- Status Indication such as Sensor open and Communication failure

Applications

- Reactor temperature & Control
- Utility temperature

Network Architecture



Specifications

Technical

Model No	DPI16S-F-X-X-X-X-X		
No. of Channel	1		
Analog Input Type	RTD (Pt100 (DIN IEC 751 Std))/ mA (4-20)/ 0-10V/ 0-1V		
Measuring Range, Accuracy and Resolution	Measuring Range	Resolution	Accuracy
	CH1	CH1	
RTD	-199.0 to 500.0°C	0.1	±0.1% of FSR
	-1.999 to 9.999	0.001	
	-19.99 to 99.99	0.01	
4-20mA/ 0-10V/ 0-1V	-199.9 to 999.9	0.1	0.1% of FSR
	-1999 to 9999	1	
Calibration (Analog Input/ Analog Output)	Zero & Span through keypad		
Display	0.8" 4 digit seven segment LED display		
	3mm LED's for status indication for communication, ADC		
Scan Rate	1 Sec		
Communication	RS485 MODBUS RTU / ETHERNET TC/IP / DNP3-RS485 MODBUS RTU / DNP3-ETHERNET TCP/IP		
Memory	Internal memory storage for 5,24,088 records over 365 days with a 1-minute logging interval.		
Security	Password protected programming mode		

Physical

Enclosure	Flame proof for Zone1, Zone2 Gas Gr.IIA, IIB (or) zone1, zone2 GasGr. IIC
Weight	4.0Kg (approx)
Dimensions (LxWxD)	243x144x96.5mm
Cable Entries	3 No's ¾" ET
Glands/ Dummies	Not Provided (Order separately)

Environmental

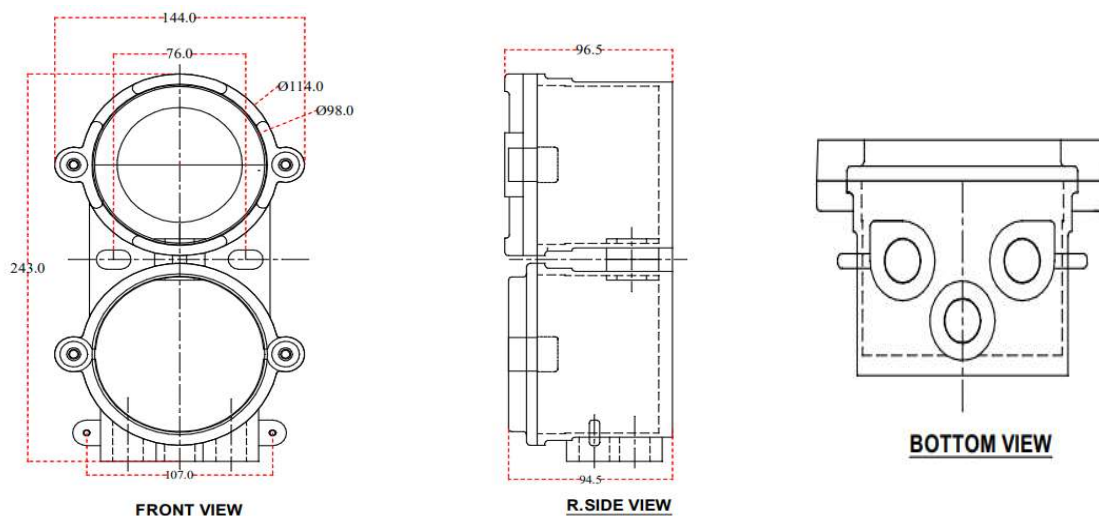
Operating Temperature	10 to 50 °C
Humidity	10-95%RH, Non-Condensing

Note: accessories are not included and order separately

Ordering Information for DPI16S						
DPI16S	X	X	X	X	X	X
Model No	Enclosure Type	Analog Input	Data logging	Communication	Power Supply	Future Use
DPI16S	F – FLP IIA & IIB	1 – RTD	0 – No Data logging	0 – No	1 – 230V AC	
	C – FLP IIC	2 – 4-20mA	1 – Data logging	1 – DNP3-Ethernet TCP/IP	2 – 24V DC	
		3 – 0-10V/0-1V		2 – DNP3-RS485 MODBUS RTU		
				3 – RS485-MODBUS RTU		
				4 – Ethernet TCP/IP		

Note: *Specify the range for Analog Inputs

MECHANICAL DRAWING OF DPI16S



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All specifications are subject to change
without notice.
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