

## CLEAN ROOM PROCESS MONITOR

DPI381-R



"DPI381" is specially designed for Clean rooms to meet the requirement of Measurement, Display & Data logging of Relative Humidity, Temperature and Differential Pressure for meeting the Regulatory requirements in API's & Formulations

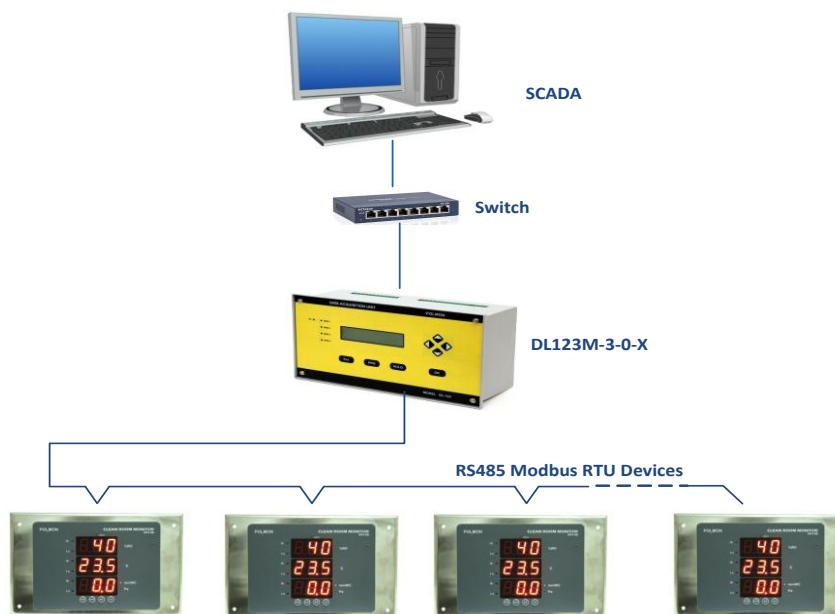
### Features

- **1/2/3 Channel Display with 0.8"** Seven Segment Red LED Display
- **Wide range of Input Options** for Remote Tx interface / Inbuilt Sensors
- **Programmable Set points** for each parameter (HI/LO) for Visual and LED Annunciation
- **User configurable (enable/disable)** Inbuilt Buzzer to provide audible Process value violation
- **Option for Buzzer Acknowledgement** and Snoozing
- **Process value violations display** indication
- **Password protected calibration & other** programming modes
- **Software Calibration & Ranging** through soft touch tactile keypad
- **User configurable (enable/disable)** Inbuilt Relay (1- NO, NC)
- **Relay Output with Programmable** Acknowledgement and Snoozing
- **Opto Isolated RS-485 Communication** to transfer the data for storage through Proprietary protocol or MODBUS protocol
- **MODBUS interface Max 31 Devices** without Repeater
- **Programmable Baud Rate selection** 9600 / 19200 / 38400
- **Optional 4-20mA O/P** for single channel
- **Safe area applications with SS** Faceplate, flush mount (Brick Wall / Modular Wall) and On Wall Mount for Clean Room Application
- **Clean Room compatible Concealed** Enclosure (Depth 45 mm)

### Applications

- **Environmental Monitoring for Clean Rooms**

### Network Architecture



# Specifications

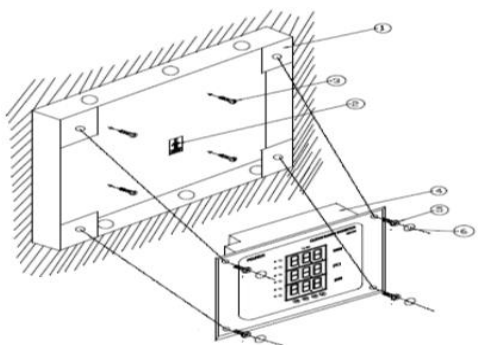
Technical	
Model No	DPI38I-X-X-X-X-X-X
No of Channel	1/2/3
	Inbuilt Sensor
Input Type	RH, Temperature & DP
	External Sensor
Measurement Range	DP : $\pm 100$ mmWC / -199 to 980 Pascal RH : 0 to 100%RH Temp. : 0.0°C to 60.0°C
Input Accuracy	DP: $\pm 1.5\%$ FSR RH: $\pm 2\%$ for the range 10 to 90% and $\pm 3\%$ for remaining Temperature: $\pm 0.4^\circ\text{C}$ for the range 0.0 to 60.0°C
Resolution	DP: 0.1 mmWC for -19.9 to 99.9 mmWC and 1 mmWC for Remaining / 1 Pascal RH: 1% Temp: 0.1°C
Output	Default: - Relay (1 - NO, NC) Output 1: - Communication (RS-485 - Proprietary / MODBUS/RTU) Output 2: - Current O/P (4-20mA@500 $\Omega$ load, Software Selectable for a Single Channel) (Optional)
Output Accuracy	$\pm 0.05$ mA
Response time	DP: 1 second RH & Temp: Typically 12 second
Buzzer	In built Buzzer provided to beep in set values violated condition with user configurable Snooze option
Display	CH1: 3 digit 0.8" seven segment, Red LED with Hi and Lo LED Indication CH2: 3 digit 0.8" seven segment, Red LED with Hi and Lo LED Indication CH3: 3 digit 0.8" seven segment, Red LED with Hi and Lo LED Indication
Keypad	Tactile Keys
I/P Impedance	mA : 100 $\Omega$ , Voltage: > 1M $\Omega$
Power Supply	
Input Supply	20-36Volt AC/DC, 250mA
Physical	
Enclosure	SS Face Plate with Flush Mount MS
Dimensions	Cutout: 150x210x45 (LxWxD)mm , SS Plate: 170x260 x5 (LxWxD)mm
Mounting	Brick Wall, Modular Wall and On Wall (Order Optional Accessories)
Environmental	
Operating Temperature	10 to 50°C
Humidity	10-95%RH, Non-Condensing

Note: accessories are not included and order separately

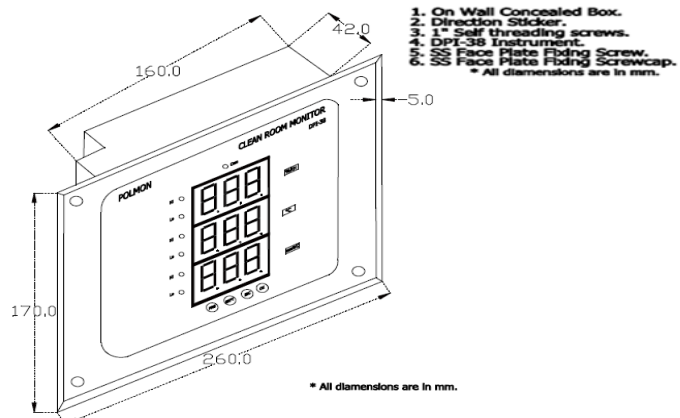
Ordering Information for DPI38I							
DPI38I	X	X	X	X	X	X	X
Model No.	Enclosure Type	Display	Output1	Output2	Power	SS Plate Type	* DP <sup>®</sup> Sensor Range
DPI38I	R-NFLP	1- DP <sup>®</sup> (Inbuilt Sensor)	1 - RS485	1 - NA	1-24VAC/DC	X-Screw type Bend Plate	1 - $\pm 100.0$ mmWC/ $\pm 1000$ Pascal
	F-FLP	2- Temp (Inbuilt Sensor)		2 - 4-20mA (for Single I/P)		1-Push Fit	2 - $\pm 12.5$ mmWC/ $\pm 125$ Pascal
		3- RH + Temp (Inbuilt Sensor)				# 2-17mm Bend Plate	
		4- Temp + DP <sup>®</sup> (Inbuilt Sensor)					
		5- RH + Temp + DP <sup>®</sup> (Inbuilt Sensor)					
		**6- DP (Remote Input)					
		**7- Temp (Remote Input)					
		**8- RH + Temp (Remote Input)					
		**9- Temp + DP (Remote Input)					
		**10- RH + Temp + DP (Remote Input)					
		**11- Temp (Remote Input) + DP <sup>®</sup> (Inbuilt Sensor)					
		**12- RH + Temp (Remote Input) + DP <sup>®</sup> (Inbuilt Sensor)					

# Specify Inbuilt Input Range, Unit & Resolution  
 \*\*-Specify Remote Input Range, Unit & Resolution  
 Note: \*-Specify units Pascal / mmWC

Mechanical Drawing of DPI38I



Installation Drawing of DPI38I (Wall Mount)



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All specifications are subject to change without notice.  
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