

ROOM PROCESS MONITOR

RHT76



“RHT76” is specially designed for Clean rooms to meet the requirement of Measurement, Display Relative Humidity, Temperature and Differential Pressure for meeting the Regulatory requirements in API’s & Formulations with Display of Time (HH:MM). It support MODBUS RTU / Ethernet TCP/IP for data logging solution.

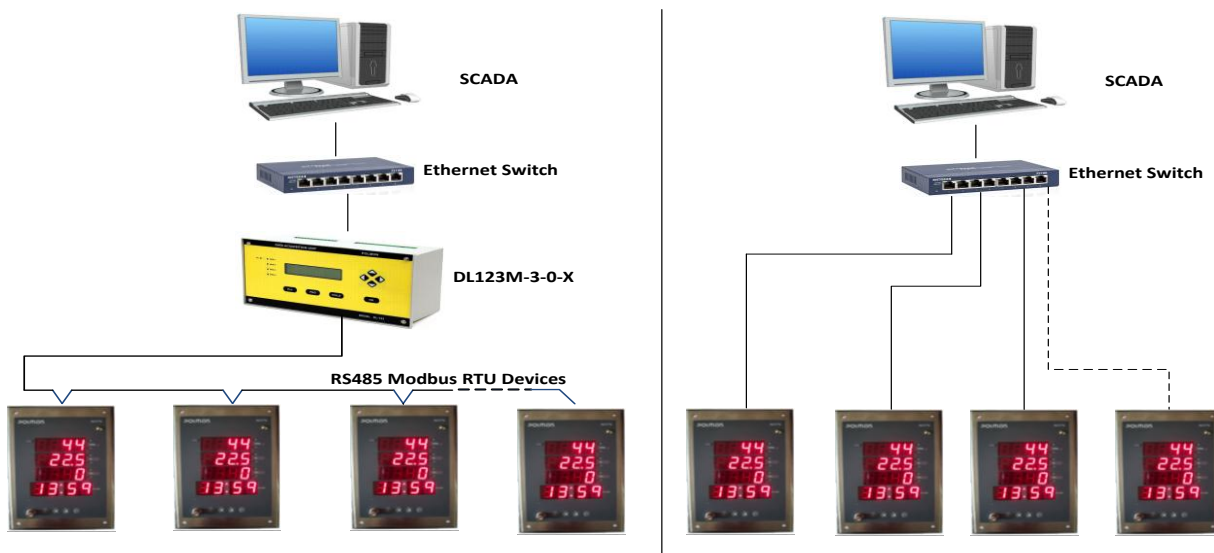
Features

- 1/2/3 Channel with Clock (for Hrs & Mins in 24 Hour Mode) Display with 0.8” Seven Segment Red LED Display
- Wide range of Input Options for Remote Tx Interface / Inbuilt Sensors
- Time Synchronization with PLC/SCADA/DCS through RS-485/Ethernet communication
- 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 violation display indication
- Password protected callibration & other programming modes
- Software Callibration & Ranging through soft touch tactile keypad
- User configurable (enable/disable) Inbuilt Relay (for Process Value) (1- NO, NC)
- AHU ON/OFF, Trip Status
- Relay Output with Programmable Acknowledgement and Snoozing
- RS-485 MODBUS RTU Communication with Maximum of 31 devices
- Ethernet MODBUS TCP/IP Communication
- Optional 4-20mA O/P for single channel
- Stand-alone mode with inbuilt clock in network failure condition
- Clean Room compatible Concealed Enclosure (Depth 45 mm)

Applications

- Environmental Monitoring for Clean Rooms with Synchronized Clock
- Data logging

Network Architecture



Specifications

Technical		Inbuilt Sensor	External Sensor
Model No	RHT76-R-X-X-X-X-X-X-X		
No. of channels	1/2/3 with Time (for Hrs & Min in 24 Hour mode)		
Display	CH1: 3 digit 0.8" seven segment (Red), Red LED with Hi and Lo LED Indication CH2: 3 digit 0.8" seven segment (Red), Red LED with Hi and Lo LED Indication CH3: 3 digit 0.8" seven segment (Red), Red LED with Hi and Lo LED Indication CH4 (Time) : 0.8" seven segment LED Display (Red) (For Hrs & Min)		
Input Type	RH, Temperature & DP	mA :4-20mA, Voltage : 0-1/0-5/0-10V (Hardware configurable)	
Measurement Range	DP : ±100mmWC / -199 to 980 Pascal, RH : 0 to 100%RH, Temp : -40 to 60.0°C	Programmable	
Input Accuracy	DP: ±1.5% of reading ± 3 Count for -19.9 to 25.4 mmWC / -199 to 254 Pascal and ±1.5% of FSD for remaining RH: ±2% for the range 10 to 90% and ±4% for remaining Temperature: ±0.5°C for the range 0.0 to 40.0°C and ±1.0°C for Remaining	0.15% of FSR ±1Count	
Resolution	DP: 0.1 mmWC / 1 Pa RH: 1% Temp: 0.1°C	Programmable	
Response time	DP: 1second RH & Temp: Typically 12 seconds	1 Sec	
Output	Default: - Relay (1 - NO, NC) Output 1: - Communication (RS-485 MODBUS RTU) / (Ethernet MODBUS TCP/IP). Output 2: - Current O/P (4-20mA@500 Ω load, Software Selectable for a Single Channel) (Optional)		
Output Accuracy	± 0.05 mA		
Digital Inputs	2 (AHU ON/OFF, Trip)		
Clock Accuracy	Depends on PLC/SCADA/DCS time, ±2 minutes/month (Stand alone mode)		
Synchronization	Depends upon PLC/SCADA/DCS		
I/P Impedance	mA : 100 Ω., Voltage: > 1MΩ		
Buzzer	In built Buzzer provided to beep in set values violated condition with user configurable Snooze option		
Keypad	Tactile Keys		
Calibration	Software (Through Keypad)		
Power Supply			
Power supply	20-36Volt AC/DC, 300mA		
Physical			
Enclosure	SS316 Face plate with Flush mount MS back box		
Dimensions (LxWxD)	155X30X45cm		
Mounting	Brick Wall, Modular Wall and On Wall (Order Optional Accessories)		
Terminals	2.5 Sq.mm Screw Terminal		
Environmental			
Operating Temperature	5-50°C		
Humidity	10-95%RH, Non-Condensing		

Ordering Information for RHT76

RHT76	X	X	X	X	X	X	X	X	X
Model No	Enclosure type	Display	output1	Output2	Power	Time	Date	*** D1, D2, D3 Display Parameter Selection	* Sensor Range
RHT76	R – NFLP	1 – DP (Inbuilt Sensor)	1 – RS485	1 – NO	1 – 24V AC/DC	X – No	X – No	## X – Standard	±100.0mmWC / ±1000 Pascal
	F – FLP	2 – Temp (Inbuilt Sensor)	2 – Ethernet	#2 – 4-20mA (for Single I/P)		1 – Yes	1 – Yes	##N – Non Standard	2 – ±12.5mmWC/ ±125Pascal
		3 – RH + Temp (Inbuilt Sensor)	3 – RS485 + AHU Status						
		4 – Temp + DP (Inbuilt Sensor)	4 – Ethernet + AHU Status						
		5 – RH+Temp+DP (Inbuilt Sensor)							
		**6 – DP (Remote Tx Input)							
		**7 – Temp (Remote Tx Input)							
		**8 – RH+ Temp (Remote Tx Input)							
		**9 – Temp + DP (Remote Tx Input)							
		**10 – RH + Temp + DP (Remote Tx Input)							
		**11 – Temp (Remote Tx Input) + DP (Inbuilt Sensor)							
		**12 – RH + Temp (Remote Tx Input) + DP (Inbuilt Sensor)							

Note:

*specify units Pascal /mmWC

D1 - Display1, D2 - Display2, D3 - Display3, R - RH, T - Temp, D - DP, X – No Display

X – Standard – R,T,D / R,X,T / X,D,X / X,T,X

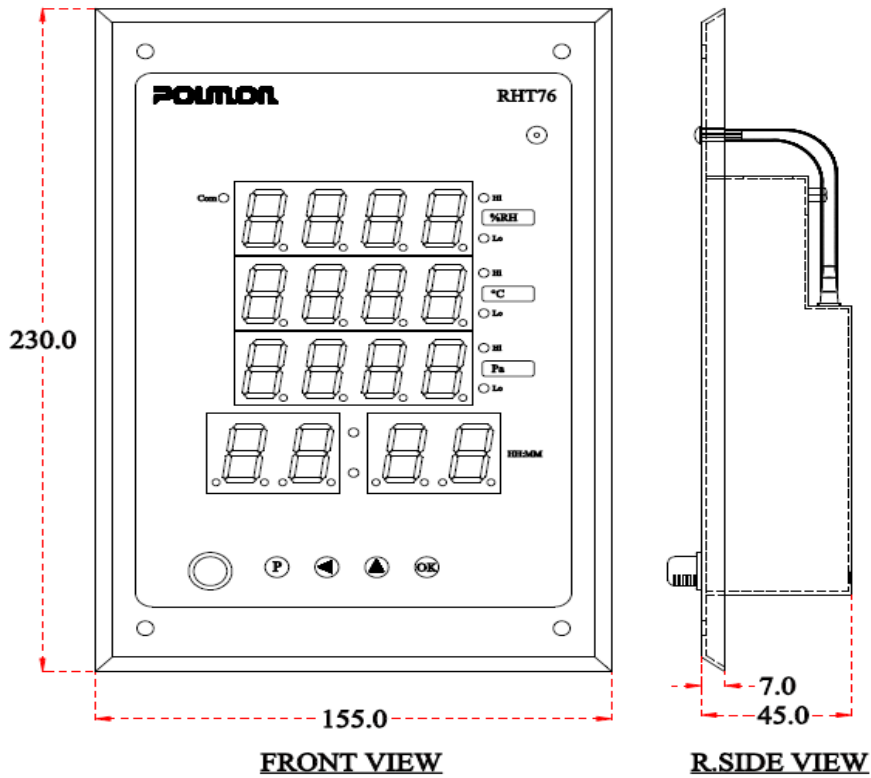
##N – Non Standard - Need to be confirmed by customer to select overlay model while ordering.

** -Specify

Input Type	0-10V/4-20mA
Input Range	Specify
Unit	Specify

#-Specify

Output Range	Specify for type of Single input parameter (DP/RH/Temp)
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Mounting Drawing

