

TIME SYNC CLEAN ROOM MONITOR

RHT74



“RHT74” 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 with Display of Time.

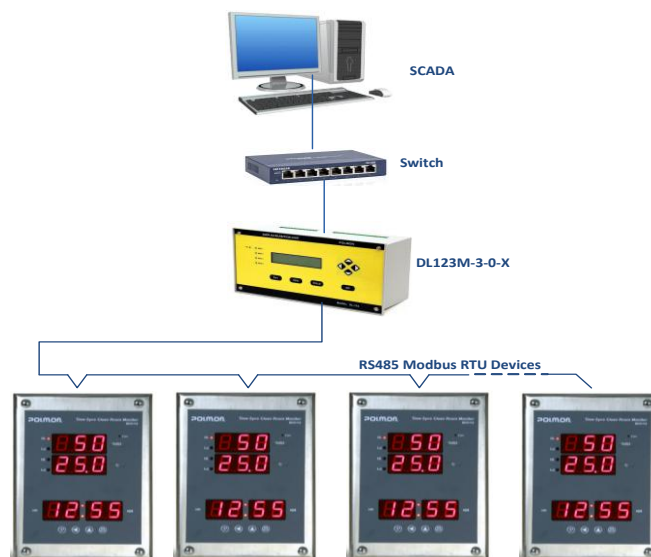
Features

- 1/2/3 Channel with Clock (for Hrs & Mns in 24 Hour Mode) Display with 0.8” Seven Segment Red LED Display
- Min/ Max values for RH & Temp can also be displayed on display
- Wide range of Input Options for Remote Tx Interface / Inbuilt Sensors
- Time Synchronization with PLC/SCADA/DCS through RS-485 communication
- Programmable Set points for each parameter (HI/LO) for Visual and LED Announciation
- 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 calibration & other programming modes
- Software Calibration & Ranging through soft touch tactile keypad (NFLP) or Magnetic Keys (FLP)
- User configurable (enable/disable) Inbuilt Relay (for Process Value) (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
- Stand-alone mode working in network failure condition
- Optional 4-20mA O/P for single channel
- Stand-alone mode working clock in network failure condition
- Safe area and Hazardous area applications
- 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	RHT74-R-X-X-X-X-X		
No. of channels	1/2/3 with Clock (for Hrs & Min in 24 Hour mode)		
Input Type	RH, Temperature & DP	mA : 0-20/4-20mA, Voltage : 0-1/0-5/0-10V (Hardware configurable)	
Measurement Range	DP : ± 100 mmWC / -199 to 980 Pascal, RH : 0 to 100%RH, Temp : 0 to 60.0°C	Programmable	
Input Accuracy	DP: $\pm 1.5\%$ of reading ± 3 Count for -19.9 to 25.4 mmWC / -199 to 254 Pascal and $\pm 1.5\%$ of FSD for remaining RH: $\pm 2\%$ for the range 10 to 90% and $\pm 4\%$ for remaining Temperature: $\pm 0.4^\circ\text{C}$ for the range 0.0 to 60.0°C	0.15% of FSR ± 1 Count	
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 - Proprietary / MODBUS) Output 2: - Current O/P (4-20mA@500 Ω load, Software Selectable for a Single Channel) (Optional)		
Output Accuracy	± 0.05 mA		
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		
Display	0.8" 3 digit Seven segment LED Display		
Keypad	Tactile Keys (NFLP) / Magnetic Keys (FLP)		
Calibration	Software (Through Keypad)		
Power Supply			
Power supply	20-36Volt AC/DC, 300mA		
Physical			
Enclosure	SS Face Plate with Flush Mount MS		
Dimensions (LxWxD)	SS Plate: 230x155x5 mm, MS Back Box: 160x126x43 mm		
Mounting	Brick Wall, Modular Wall and On Wall (Order Optional Accessories)		
Environmental			
Operating Temperature	5-50°C		
Humidity	10-95%RH, Non-Condensing		

Note: accessories are not included and order separately

Ordering Information for RHT74							
RHT74	X	X	X	X	X	X	X
Model No.	Enclosure Type	Display	Output1	Output2	Power	Future	* Sensor Range
RHT74	R-NFLP	1- DP (Inbuilt Sensor)	1 - RS485	1 - NA	1-24VAC/DC	X - Clock	± 100.0 mmWC/ ± 1000 Pascal
	F-FLP	2- Temp (Inbuilt Sensor)		#2 - 4-20mA (for Single I/P)		1 - No Clock	2 - ± 12.5 mmWC/ ± 125 Pascal
		3- RH + Temp (Inbuilt Sensor)					
		4- Temp + DP (Inbuilt Sensor)					
		5- RH + Temp + DP (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 (Inbuilt Sensor)					
		**12- RH + Temp (Remote Input) +DP (Inbuilt Sensor)					

Note: *-Specify units Pascal / mmWC

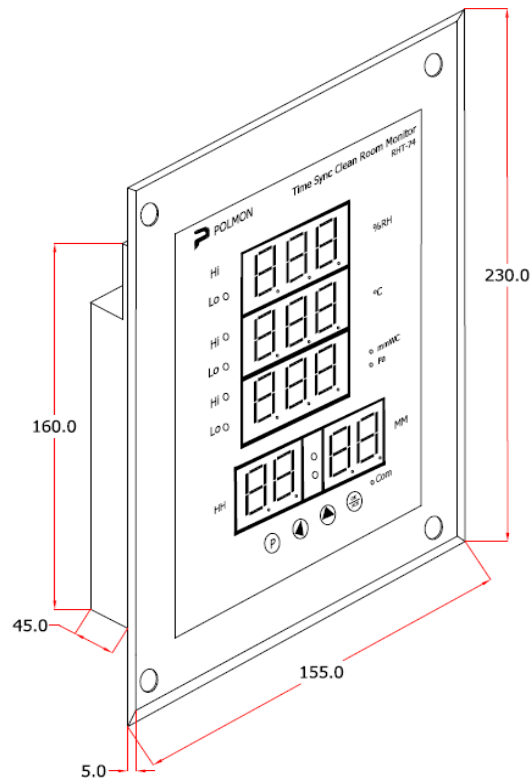
Note:

** -Specify

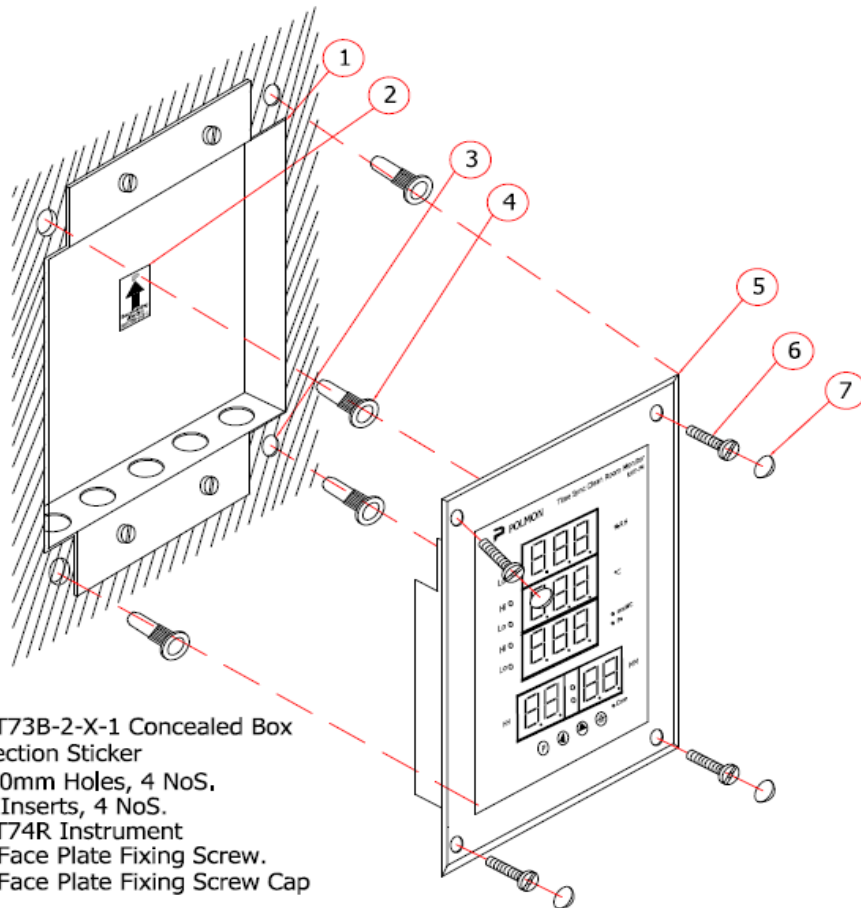
-Specify

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

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



1. RHT73B-2-X-1 Concealed Box
2. Direction Sticker
3. Ø6.0mm Holes, 4 NoS.
4. M4 Inserts, 4 NoS.
5. RHT74R Instrument
6. SS Face Plate Fixing Screw.
7. SS Face Plate Fixing Screw Cap