

# THE CLEAN ROOM MONITOR

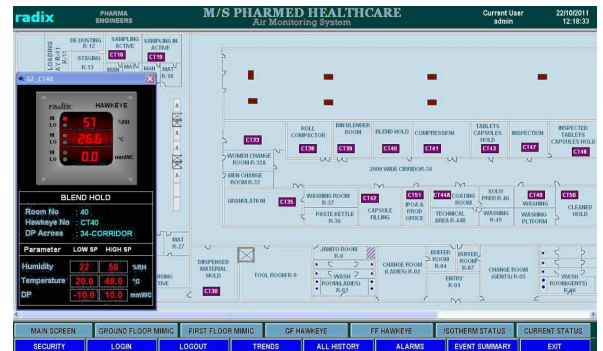
## RH+T/DP INDICATOR



### FEATURES

- Microcontroller based
- RH, Temperature & DP measurement
- 2-row, 0.8" (20.3 mm), large, bright LED display
- Software programmable channel ranges, units & input types
- User programmable for 1 or 2 channel measurement
- 2 programmable Alarms with visual annunciation
- 2 programmable Alarms with open collector outputs to operate external relays
- Software calibration for all 2 channels
- Calibration history / schedule for validation
- RS485/MODBUS RTU multidrop communication for PLC, SCADA, etc.
- 24 VDC or 85~265 VAC SMPS supply
- Powerful, user-friendly SCADA available
- FDA 21CFR Part11 compliant SCADA version also
- Advanced digital RH+T sensor technology

### SCADA SOFTWARE



#### SCADA Software - Elipse E3

- Flexible trend facility - current and historical
- Alarm function
- Allows read (acquire data) & write (program setpoint, etc) operations
- Supports thousands of tags
- Supports upto 32 or more instruments
- Capable of storing data upto 10 years
- Default screen selection

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## RH+T/DP INDICATOR

### SPECIFICATIONS

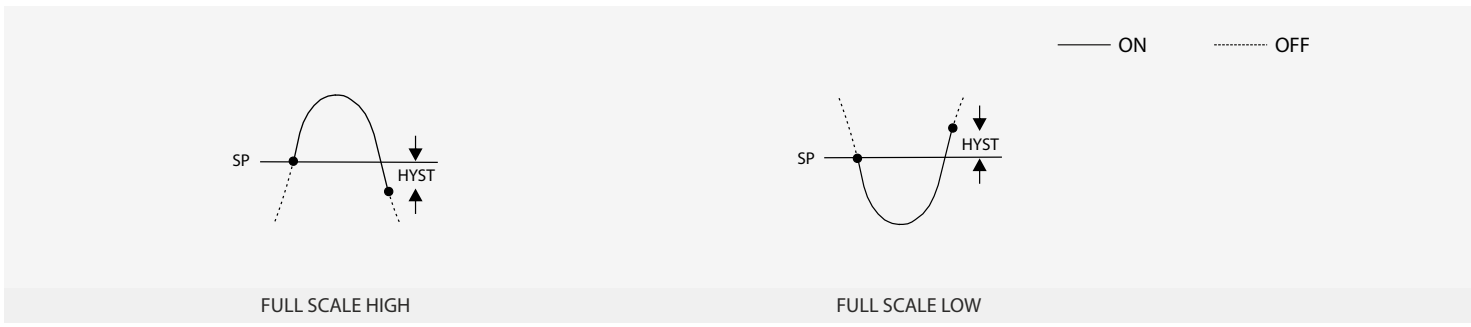
All specifications at ambient of 25 °C, unless specified otherwise

<b>INPUTS</b>	
No. of inputs	3 (RH, T, DP)
Input RH	a) Integral, radix RH+T sensor b) 0-1 V DC c) 0-10 V DC d) 4~20 mA e) RH signal from Radix RH+T sensor (SHT20, SHT30, etc)
Input T	a) Integral, radix RH+T sensor b) 0-1 V DC c) 0-10 V DC d) 4~20 mA e) RH signal from Radix RH+T sensor (SHT20, SHT30, etc)
Input DP	a) 0-1 V DC b) 0-10 V DC c) 4~20 mA d) Integral Radix DP sensor
Transmitter supply (V <sub>TX</sub> )	20 V nominal, 100 mA max
Range	%RH 0~100% RH Temperature -19.9 ~ 90.0 °C (user selectable) DP -199 ~ 900Pa, -19.9 ~ 90.0mmWC (user selectable)
Accuracy	
For Integral Sensors	
%RH	± 2% RH
Temperature	± 0.3 °C
DP	± 1.5% of reading ± 5 Pa, ± 1.5% of reading ± 0.5 mmWC
For Remote Input	
%RH	± 1% RH
Temperature	± 0.25% of span (min ±0.2 °C)
DP	± 0.25% of span (min ±0.3 mmWC)
<b>INDICATION</b>	
Row1	Window 1, 3 digit, 7 segment 0.8" (20.3 mm) red LED display
Row2	Window 2, 3 digit, 7 segment 0.8" (20.3 mm) red LED display
Status indication	LEDs for visual alarms, RS485 signals
<b>OUTPUTS</b>	
No. of open collector outputs	2
No. of visual alarms	4
<b>COMMUNICATION</b>	
Port	RS485, isolated
Baud rate	9600 bps
Protocol	Modbus RTU
Slave ID	User programmable, 1~247
Minimum polling interval	200 milliseconds
Parameters	
Process variables	Read only
Setpoints	Read & write from the host computer
Alarm status	Read only
Input bias	Read & write from the host computer
<b>ENCLOSURE</b>	
Construction	Type A Integral RH+T+DP in front sensing Type B Integral RH+T+DP sensing at rear Type C RH+T+DP from remote 2-wire transmitters/Sensors Type D Integral RH+T transmitter, DP sensing : Any
MOC	Faceplate SS304 Body MS, powder coated
Dimensions (in mm)	Type A, B, C 200(W)x180(H)x30(D) mm Type D 200(W)x180(H)x65(D) mm
Mounting	Modular panel a) 50 mm or more b) 100 mm or more Brick wall Using accessories grouting box and SS304 interface plate (both to be ordered separately)
Cutout (in mm)	177(W) x 165(H)
<b>PROGRAMMABLE PARAMETERS</b>	
Setpoint	% RH 0 ~ 100 Temperature -19.9 ~ 90.0 °C DP -19.9 ~ 90.0 mmWC -199 ~ 900 Pa
Resolution	0.1 for RH & T 0.1 for DP unit mmWC 1 for DP unit Pa
Digital filter	A (minimum) ~ F (maximum)
Hysteresis	User selectable
Alarm logic (Fig 1)	a. Full scale high b. Full scale low
Alarm type	Self reset
Setpoint lock	ON, OFF
<b>OTHER</b>	
Programming	Through 3 tactile keys
Supply voltage	a) 85~265 V AC, 50/60 Hz b) 20~30 V DC
Power consumption	4 watts maximum
Operating ambient temperature	0~50 °C
Relative humidity	Below 90%, non condensing

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FIG 1 ALARM LOGIC



### ORDERING INFORMATION

2584 -

Product code	A	B	C	D	E	F	G	H	I	J
	RH+T Sensing Position	DP Sensing Position	RH Input	Temperature Input	DP Input	DP Unit	Supply voltage	Communication	Buzzer Output	Alarm Acknowledge Key
2584	1 None	1 None	1 None	1 None	1 None	1 None	1 85-265 VAC	1 Not provided	1 Not provided	1 Not provided
	2 Integral Sensor front	2 Integral Sensor front	2 Integral RH+T sensor	2 Integral RH+T sensor	2 Integral DP sensor	2 mmWC	2 17-35 VDC	2 RS485, Isolated	2 Provided	2 Provided
	3 Integral Sensor rear	3 Integral Sensor rear	3 0-10 VDC	3 0-10 VDC	3 0-10 VDC	3 Pa				
	4 Remote Transmitter	4 Remote Transmitter	4 4-20 mA	4 4-20 mA	4 4-20 mA					
	5 Integral Transmitter									

CAT#545R1/A

ENQUIRIES

Instruments: sales@radix.co.in  
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 Automation: automation@radix.co.in  
 Level: level@radix.co.in

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