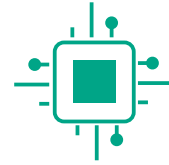
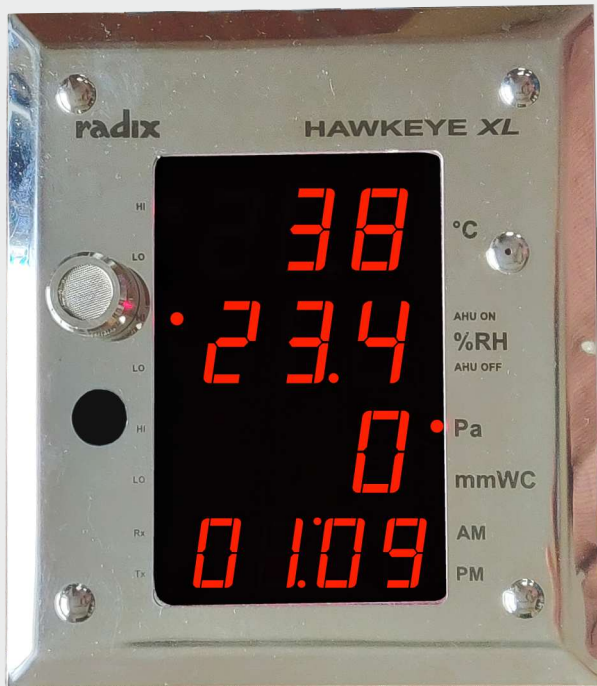


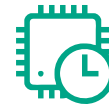
THE CLEAN ROOM MONITOR

LARGE 1" DISPLAY, RS485 / MODBUS RTU

HAWKEYE XL



RH+T+DP Integral Sensor



Real Time Clock Indication



RS485 / MODBUS RTU



AHU Potential Free
Digital Input



User Programmable
Ranges, Units & Input Types



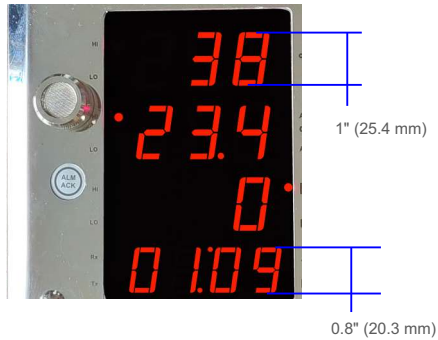
3 Alarms with Buzzer

THE CLEAN ROOM MONITOR

LARGE 1" DISPLAY, RS485 / MODBUS RTU

HAWKEYE XL

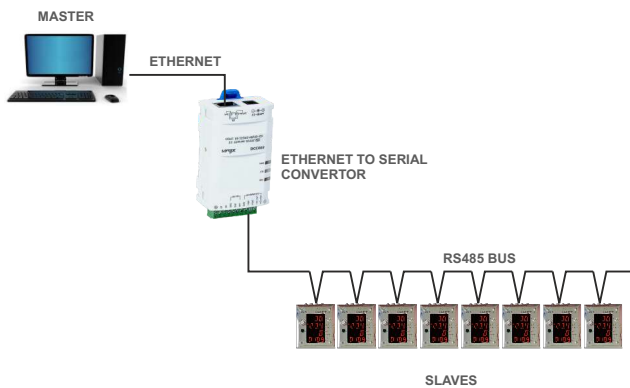
LARGE DISPLAY



COMPACT DESIGN / LOW DEPTH



RS485 / MODBUS RTU



NO TOUCH ALARM ACKNOWLEDGE



THE CLEAN ROOM MONITOR

LARGE 1" DISPLAY, RS485 / MODBUS RTU

HAWKEYE XL

SPECIFICATIONS

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

INPUTS		
No. of inputs		3 (RH, T, DP)
	Input RH	a) Integral, radix RH+T sensor b) 0-10 V DC c) 4~20 mA d) Received from RS485 / MODBUS RTU master
	Input T	a) Integral, radix RH+T sensor b) 0-10 V DC c) 4~20 mA d) Received from RS485 / MODBUS RTU master
	Input DP	a) Integral Radix DP sensor b) 0-10 V DC c) 4~20 mA d) Received from RS485 / MODBUS RTU master
Range		
	%RH	0~100% RH (user selectable)
	Temperature	-40 ~ 120 °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 ± 3 Pa, ± 1.5% of reading ± 0.3 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)
RTC ACCURACY		
	Stand-alone mode	±3 seconds per day
	Slave with SCADA as Master	Same as Server RTC ±10 sec
INDICATION		
	% RH	Window 1, 3 digit, 7 segment 1" (25.4 mm) red LED display
	Temperature	Window 2, 3 digit, 7 segment 1" (25.4 mm) red LED display
	Differential Pressure	Window 3, 3 digit, 7 segment 1" (25.4 mm) red LED display
	Real Time Clock	Window 4, 4 digit, 7 segment 0.8" (20.3 mm) red LED display
	Status indication	LEDs for visual alarms, RS485 signals
OUTPUTS		
	Buzzer output	1
	No. of visual alarms	6
	Alarm acknowledge	Through No touch, key
CLOCK		
	Real time clock	Provided
	Battery backup	Provided

THE CLEAN ROOM MONITOR

LARGE 1" DISPLAY, RS485 / MODBUS RTU

HAWKEYE XL

SPECIFICATIONS

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

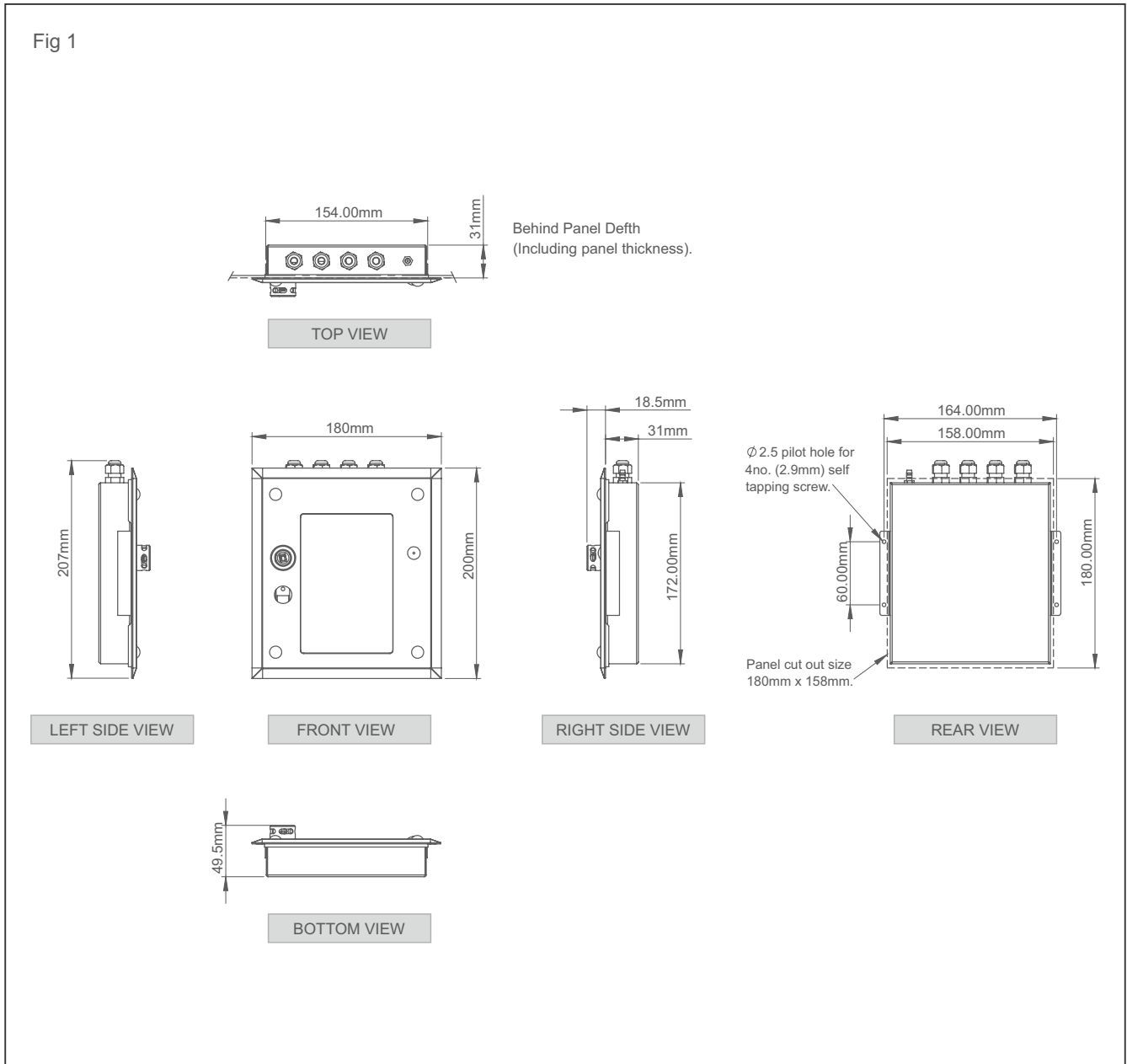
COMMUNICATION	
Port	RS485, isolated
Baud rate	9600 bps, 19600 bps, 38400 bps
Protocol	Modbus RTU
Slave ID	User programmable, 1~247
Minimum polling interval	200 milliseconds
Parameters Process variables	Read & write from the host computer
Setpoints	Read & write from the host computer
Alarm status	Read only
Input bias	Read & write from the host computer
RTC synchronization	Read & write from the host computer
PROGRAMMABLE PARAMETERS	
Setpoint	
% RH	0 ~ 100
Temperature	-19.9 ~ 90.0 °C
DP	-19.9 ~ 90.0 mmWC -199 ~ 900 Pa
Resolution	1 for RH 0.1 for T 0.1 for DP unit mmWC 1 for DP unit Pa
Digital filter	A (minimum) ~ F (maximum)
Hysteresis	User selectable
Alarm logic (Fig 2)	a. Full scale high b. Full scale low
Alarm type	Self reset
Alarm activation delay	User selectable, 0~999 sec / min
Alarm deactivation delay	User selectable, 0~999 sec / min
Setpoint lock	ON, OFF
Datalogging interval	User selectable, 1 ~ 999 min
ENCLOSURE	
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 mirror finish, SCC304 matt finish
	Body MS, powder coated
Dimensions (in mm)	180(W)x200(H)x31(D) mm
Mounting	
	Modular panel 50 mm or more
	Brick wall Using accessories grouting box and SS304 interface plate (both to be ordered separately)
Cutout (in mm)	165(W) x 177(H)
OTHER	
Programming	Through 4 tactile keys
Supply voltage	24V DC
Power consumption	4 watts maximum
Operating ambient temperature	0~50 °C
Relative humidity	Below 90%, non condensing

THE CLEAN ROOM MONITOR

LARGE 1" DISPLAY, RS485 / MODBUS RTU

HAWKEYE XL

DIMENSIONS mm



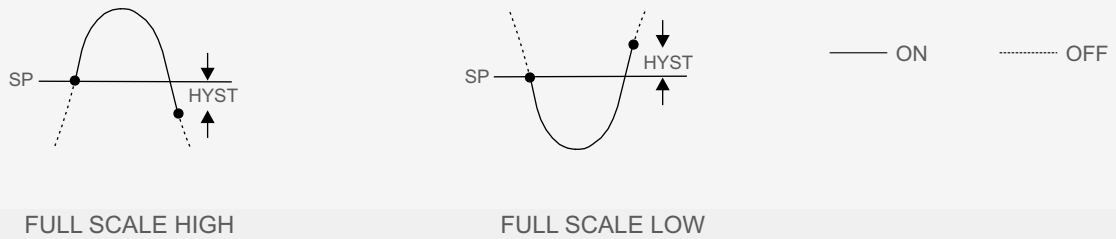
THE CLEAN ROOM MONITOR

LARGE 1" DISPLAY, RS485 / MODBUS RTU

HAWKEYE XL

ALARM LOGIC

Fig 2



FEATURES SUMMARY

- 7 Segment LED display : 1" for PV and 0.8" for TIME (HH:MM)
- RH, Temperature & DP measurement
- User programmable ranges, units & input types
- 3 alarms with buzzer output
- Real Time Clock with battery back-up
- RTC Synchronised with server clock via RS485
- Software calibration for all 3 channels
- RS485 / MODBUS RTU multidrop communication for PLC, SCADA, etc.
- 24V DC supply

THE CLEAN ROOM MONITOR

LARGE 1" DISPLAY, RS485 / MODBUS RTU

HAWKEYE XL

ORDERING INFORMATION

CODE	SPECIFICATION	1	2	3	4	5	6	7	8	9	10	11
2991												
1	RH+T Sensing Position											
	None	A										
	Integral sensor front	B										
	Integral sensor rear	C										
	Remote transmitter	D										
2	DP Sensing Position Position											
	None		1									
	Integral sensor front		2									
	Integral sensor rear		3									
	Remote transmitter		4									
3	RH Input											
	None			A								
	Integral RH+T sensor			B								
	4~20 mA			C								
	0~10 VDC			D								
4	Temperature Input											
	None				1							
	Integral RH+T sensor				2							
	4~20 mA				3							
	0~10 VDC				4							
5	DP Input											
	None					A						
	Integral DP sensor					B						
	4~20 mA					C						
	0~10 VDC					D						
6	DP Unit											
	None						1					
	mmWC						2					
	Pa						3					
7	AHU Input											
	None							A				
	Potential free input							B				
	Remote (through SCADA/RS485)							C				
8	Buzzer											
	None								1			
	Output without AHU								2			
	Output with AHU								3			
9	Alarm ACK											
	None									A		
	No touch key									B		
	Alarm acknowledge key									C		
10	Communication											
	Not provided										1	
	RS485 / MODBUS RTU										2	
11	Front Plate											
	SS mirror finish											A
	SS matt finish											B

Order Code Format : 2991-X-X-X-X-X-X-X-X-X-X

Example

3 x 4~20mA input (remote), Pa, AHU - potential free input, buzzer, ALM ACK, RS485, SS mirror finish plate

2991-D-4-C-3-C-3-B-2-C-2-A

ENQUIRIES

Instruments : sales@radix.co.in • + 91 9324934061
Sensors : sensors@radix.co.in • + 91 9321415829
Gauges : gauges@radix.co.in • + 91 9324936358
Automation : automation@radix.co.in • + 91 9320997925
Level : level@radix.co.in • + 91 9324936358
Flow : flow@radix.co.in • + 91 9324936358

RADIX ELECTROSYSTEMS PVT LTD
 EL-135/136/137, Electronics Zone, TTC Indl. Area, MIDC, Mahape
 Navi Mumbai - 400 710, India
 + 91 9324934061 • sales@radix.co.in

CAT#742R1/A