

# CRM-313-I

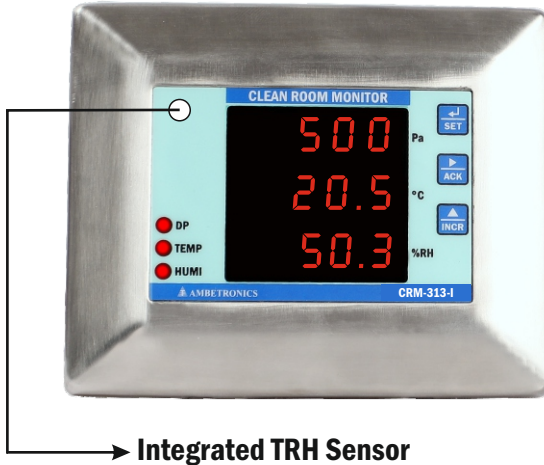
## Clean Room Monitor For Differential Pressure, Temp. & RH Indication - Integrated Sensor



**AMBETRONICS**  
AN ISO 9001:2015 CERTIFIED COMPANY

### Front View

#### Integrated TRH Sensor



### Features

- 7 Segments L.E.D. display Indication for Temperature, Humidity & Differential Pressure at a time
- Integrated Temperature and Humidity sensor connection facility
- Independent Programmable Alarm for Temperature, Humidity and Differential Pressure
- Integrated Buzzer for Alarm limits violation with acknowledgment facility
- Software calibration facility
- Password protected programming
- Isolated RS-485 communication with Modbus RTU Protocol

### Applications

- Clean room application in Pharmaceutical
- Pharma Environments monitoring applications
- HVAC (Heating, ventilation, Air conditioning, Cooling).
- Animal house clean room
- Cold Storage

## TECHNICAL SPECIFICATIONS

### Input

Temperature & Humidity Sensor	: Integrated
Differential Pressure Sensor	: Integrated Differential Pressure sensor with Brass Hose Nozzles (Chrome Plated) for +Ve & -Ve Pressure connection

### Range & Resolution

Temperature	: -20.0°C to 70.0°C
Humidity	: 0% to 100% RH,
Display resolution	: 0.1 for Temperature and RH

Differential Pressure :

Sr. No.	Range	Resolution
DP 1	(-100 to 100) mmWC,	0.1
DP 2	(-10 to 10) cmWC,	0.1
DP 3	(-7.5 to 7.5) mmHG,	0.1
DP 4	(-1000 to 1000) Pascal,	1
DP 5	(-10 to 10) Hectopascal,	0.1

Note : Other Differential Pressure Range/Unit, Available on request, Contact factory.

### Accuracy

Temperature	: $\pm 1^\circ\text{C}$
Humidity	: $\pm 3\% \text{ RH}$
Differential Pressure	: $\pm 1\% \text{ of F.S.}$

### Indication

Differential Pressure	: Upper 4 digit Seven Segment 0.4" Red L.E.D. display
Temperature	: Middle 4 digit Seven Segments 0.4" Red L.E.D. display
Humidity	: Lower 4 digit Seven Segment 0.4" Red L.E.D. display
Status indication	: 3 L.E.D.s for Alarms, one for each parameter
Audio Indication	: Integrated Buzzer for Alarm limits violation of any of the 3 parameters

### Communication

RS-485 Slave	: Isolated RS-485 communication with Modbus RTU Protocol
Programmable Settings	: Baud rate (9600 bps), Parity (O/E/N), Data bits (8), Stop bits(1/2)
No. of slave ID	: 1-250
Minimum Polling Interval	: 500 milliseconds

### Programmable Parameters

Set point	: Programmable as per input selection
Programming of parameters	: 3 Nos. push button front keys (with password protection)
Alarm logic	: High or Low, user programmable

## Environmental

Operating Ambient Temp.	: 0 to 50°C
Humidity	: Below 95% RH, Non condensing.

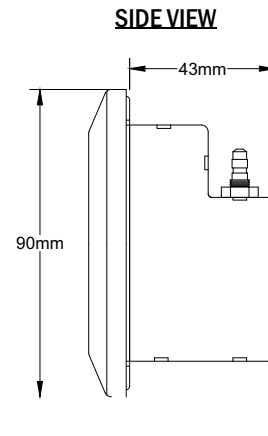
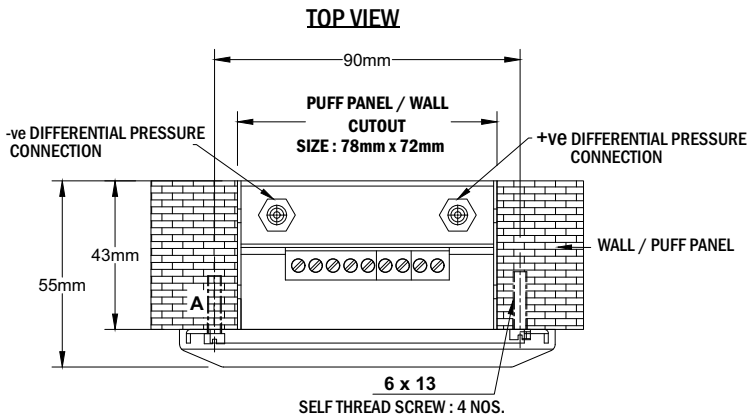
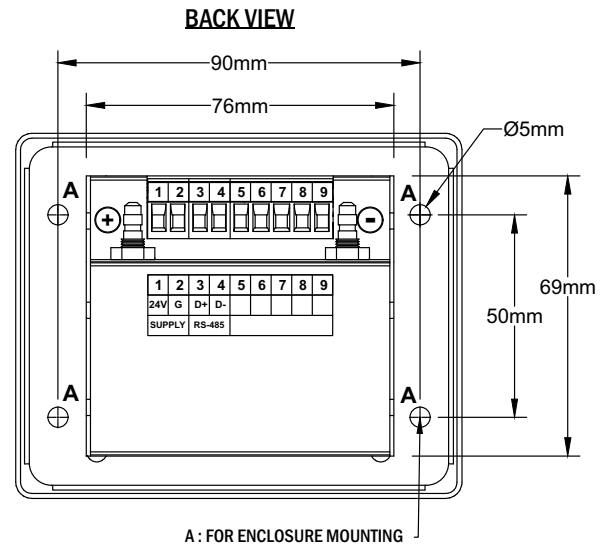
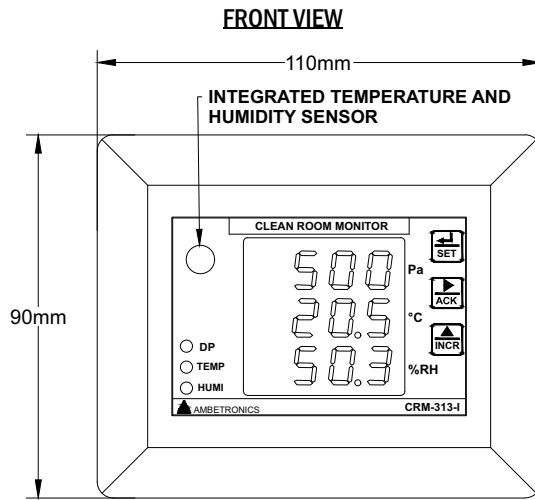
## Electrical

Supply voltage	: 24VDC ±10%
Power consumption	: Less than 1.2 watt at 24VDC

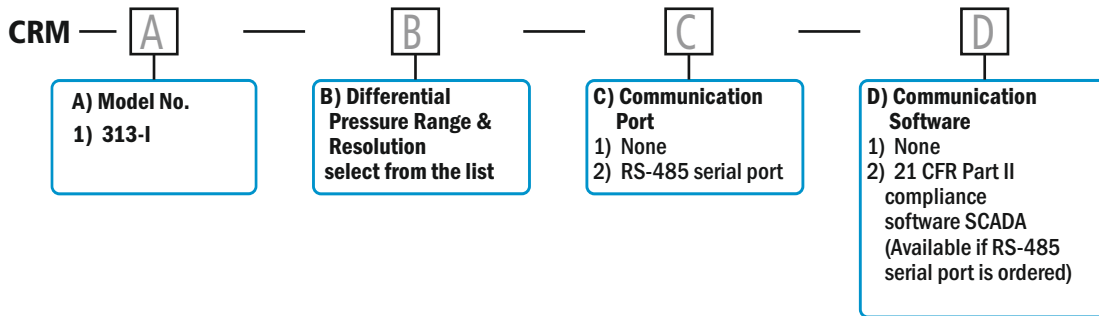
## Dimensions

Flush mounting plate	: SS-304
Front plate size	: 90 mm(H) x 110 mm(W)
Back enclosure	: MS with powder coated
Overall Dimension	: 90mm(H) x 110 mm (W) x 43mm(D)
Mounting	: Modular wall mounting with Stainless Steel Front

## DIMENSIONAL DETAILS



## ORDERING INFORMATION



\* Before placing order; Refer the above ordering information or Contact below address for assistance.

Manufactured by :



**CIMFR**



**AMBETRONICS ENGINEERS PVT. LTD.**

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Specifications subject to change without any prior notice