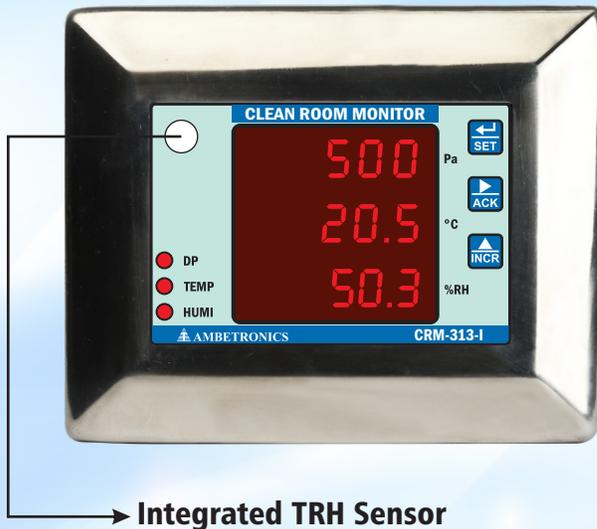


# CLEAN ROOM MONITOR FOR DIFFERENTIAL PRESSURE, TEMPERATURE AND HUMIDITY INDICATION - INTEGRATED SENSOR

Front View



## 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 60.0°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.

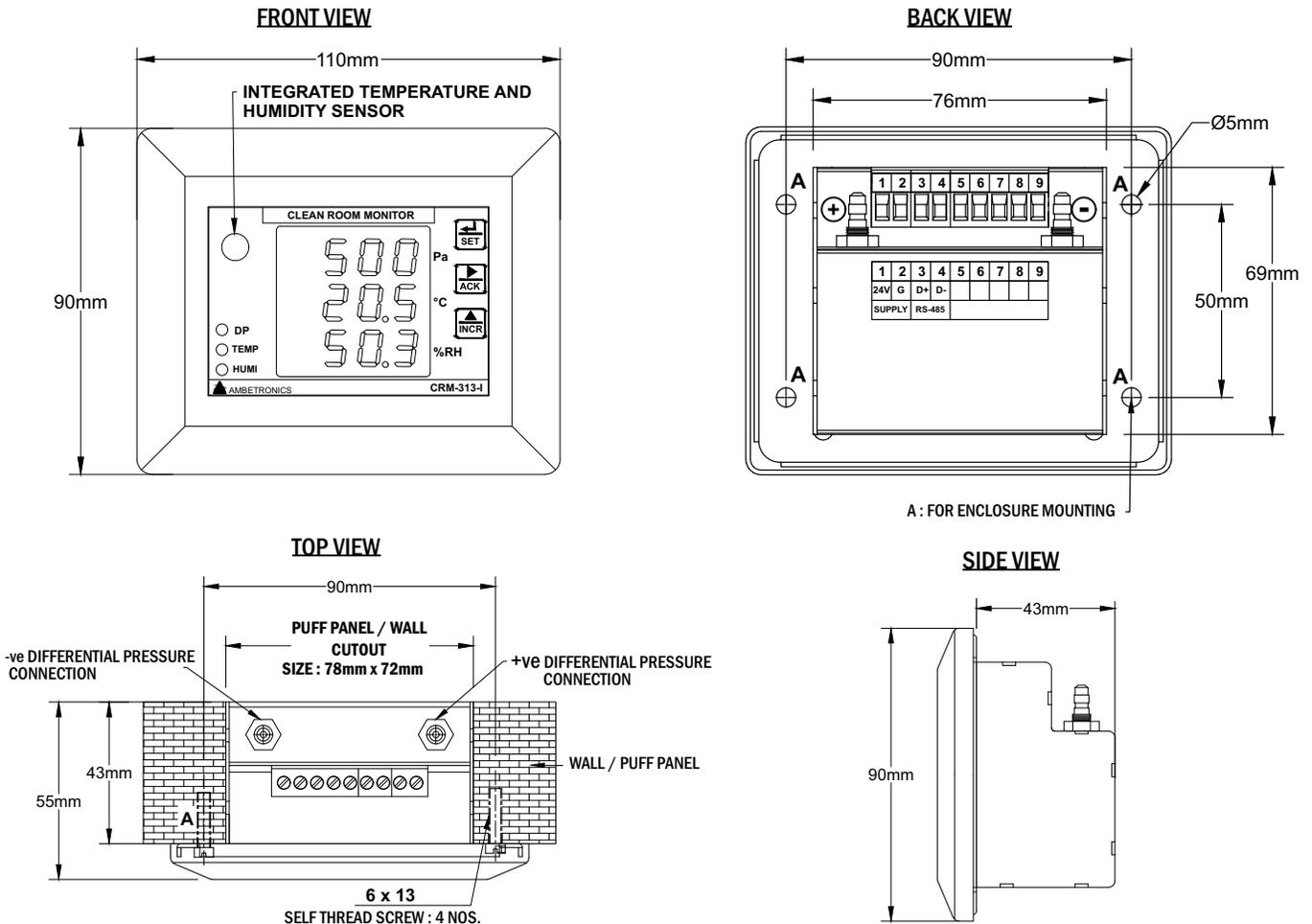
## Electrical

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

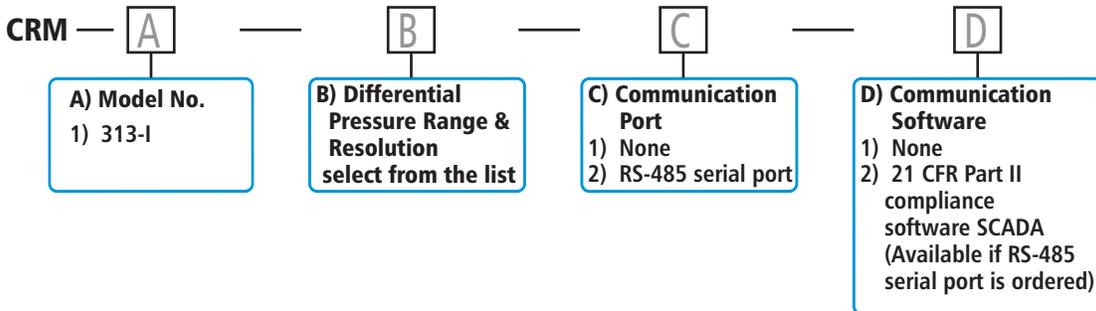
## Dimensions

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 :

**AMBETRONICS ENGINEERS PVT. LTD.**

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