

# CLEAN ROOM MONITOR FOR DIFFERENTIAL PRESSURE

Front View



## Features

- 7 Segments L.E.D. display Indication for Differential Pressure.
- User Programmable 2 no. Alarms AL1 , AL2.
- Intergrated Buzzer for Alarm limits violation with Acknowledgment facility.
- Software calibration facility, 'Calibration Due' and 'Sensor Replace' indication .
- Password protected programming
- Isolated RS-485 with Modbus RTU Protocol communication for PLC, SCADA etc.
- Optional in built 2 No Relay.
- Optional 4-20mA output.

## 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

**Sensor** : Built in Differential Pressure sensor with Brass Hose Nozzels (Chrome Plated) for +Ve Pressure connection & -Ve Pressure connection

### Range & Resolution

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

Differential Pressure :  $\pm 1\%$  of FS

### Indication

**Display** : 4 digit Seven Segment 0.4" Red L.E.D. display for Differential Pressure indication

**Status indication** : 2 L.E.D.s 'AL1 and AL2' for for Alarms and 'COM' L.E.D. for communication

**Audio Indication** : Integrated buzzer for Alarm limits violation

### Output (Optional)

**Relay** : 2 Nos. SPDT or 1 No. DPDT relay of rating '2A/24VDC' Potential free contacts (NO-C-NC)

**Current Output** : 1 No. 4-20mA output with 680E load capacity,

**Accuracy of current output** : 0.125% FS.

### 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** : 200 milliseconds

### Programmable Parameters

**Set point** : 2 Nos. AL1, AL2 User Programmable

**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** : 18 to 36VDC, Typically 24VDC

**Power consumption** : Less than 1.2 watt at 24VDC

### Dimension

**Flush mounting plate** : SS-304

**Front plate size** : 90 mm(H) x110 mm(W)

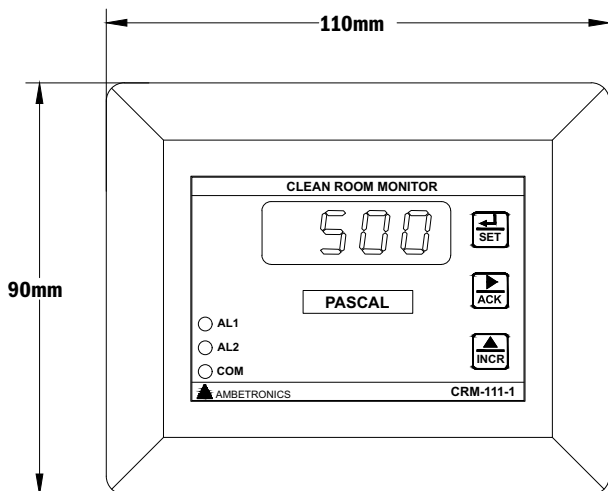
**Back enclosure** : MS with powder coated

**Over all Dimension** : 90 mm(H) x 110 mm(W) x 43 mm(D)

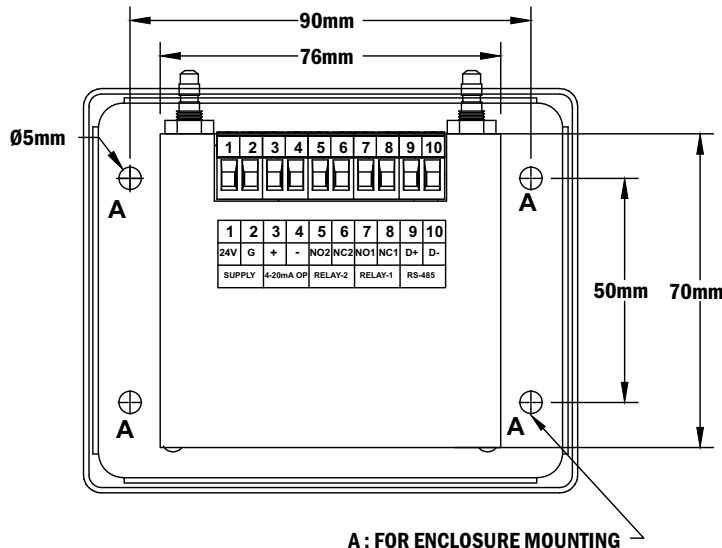
**Mounting** : Modular wall mounting with Stainless Steel Front

# DIMENSIONAL DETAILS

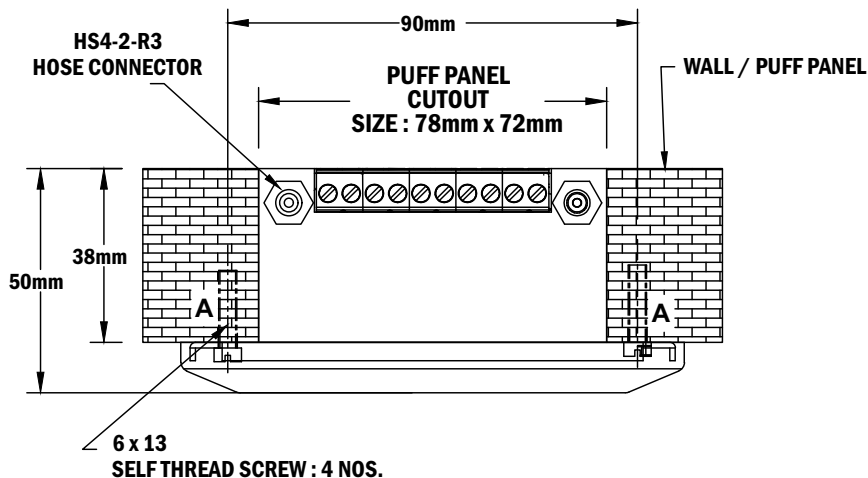
## FRONT VIEW



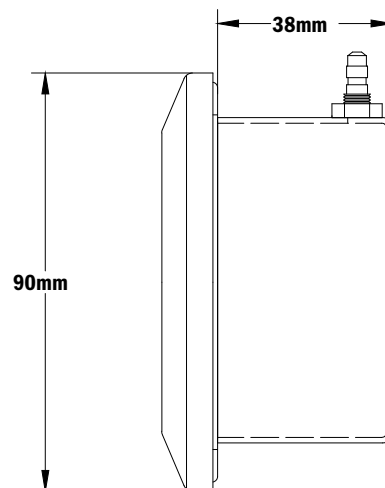
## BACK VIEW



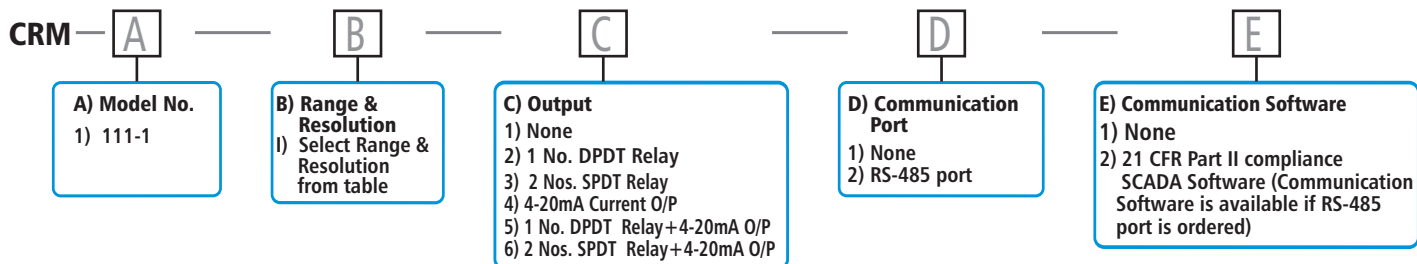
## TOP VIEW



## SIDE VIEW



# 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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