

## CLEAN ROOM MONITOR FOR OXYGEN

Front View



### Features

- 7 Segments L.E.D. display for Oxygen gas indication in % V/V.
- User Programmable 2 Nos. Alarms AL1, AL2.
- Integrated 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 for 2 programmable alarms.
- 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

### Range & Resolution

Sensor : Integrated / Remote Oxygen Sensor

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Oxygen (O<sub>2</sub>) : 0 to 25% V/V, 0.01 Resolution

### Accuracy

± 2% of Full Scale

### Indication

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

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

**Audio Indication** : Integrated Buzzer for Alarm limits violation.

### Output (Optional)

**Relay** : 2 Nos. SPDT relay or 1 No. DPDT relay of rating '2A/24VDC'

**Current Output** : 1No. 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

### Dimensions

**Flush mounting plate** : SS-304

**Front plate size** : 90 mm(H) x 110 mm(W)

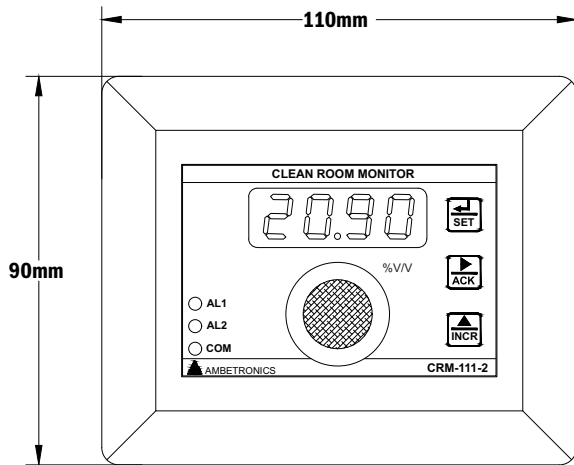
**Back enclosure** : MS with powder coated

**Over all Dimension** : 90mm(H) x 110 mm (W) x 38mm(D)

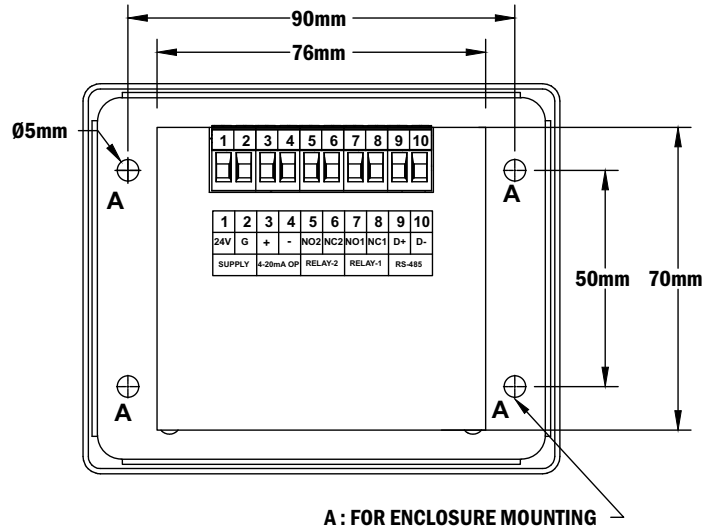
**Mounting** : Modular wall mounting with Stainless Steel Front

# DIMENSIONAL DETAILS

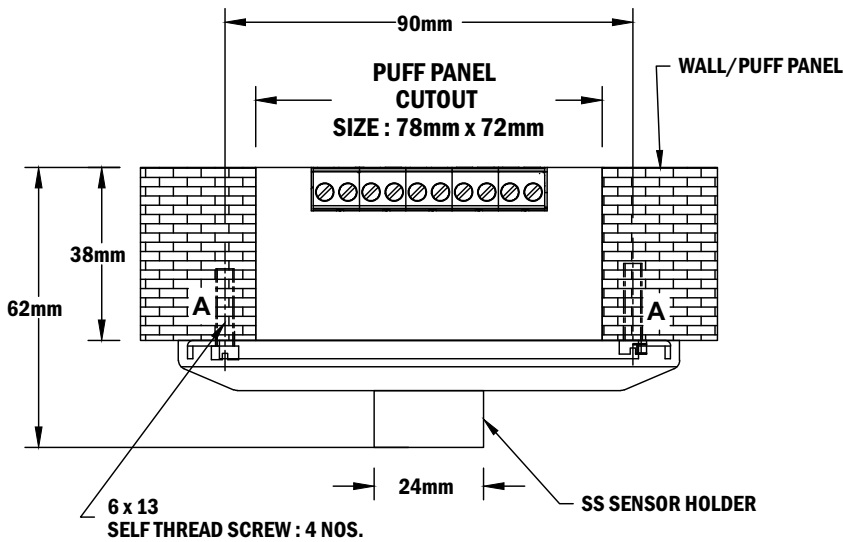
## FRONT VIEW



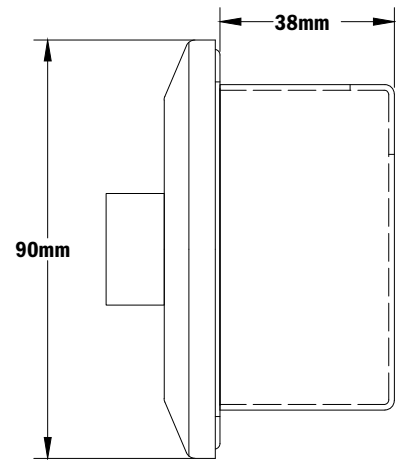
## BACK VIEW



## TOP VIEW



## SIDE VIEW



# ORDERING INFORMATION

CRM — <b>A</b>	— <b>B</b>	— <b>C</b>	— <b>D</b>	— <b>E</b>
<b>A) Model No.</b> 1) 111-2	<b>B) O<sub>2</sub> Sensor</b> 1) Integrated 2) Remote	<b>C) Output</b> 1) None 2) 1 No. DPDT Relay 3) 2 Nos. SPDT Relay 4) 4-20mA Current O/P 5) 1 No. DPDT Relay+4-20mA O/P 6) 2 Nos. SPDT Relay+4-20mA O/P	<b>D) Communication Port</b> 1) None 2) RS-485 port	<b>E) Communication Software</b> 1) None 2) 21 CFR Part II compliance SCADA Software (Communication Software is available if RS-485 port is ordered)

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

Manufactured by :

## AMBETRONICS ENGINEERS PVT. LTD.

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