IRM-PM5

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The IRM-PM5 room pressure monitor measures pressure differences between a room and its surroundings. It is essential in healthcare, laboratories, cleanrooms, and industrial settings for monitoring containment or sterile conditions. Key features include sensors, configurable alarms, real-time monitoring, and a user-friendly display to ensure safety and compliance.

The Integrated Room Pressure Monitor Solution consists of the following components:

- 5" Room Pressure Monitor
- Enclosure with I/O Board
- Room Pressure (1 Standard)
- Optional Accessories: Displays (up to 3 additional) and Room Pressure (up to 2 additional)

IRM-PM5

DIS-PM05 SPECIFICATIONS

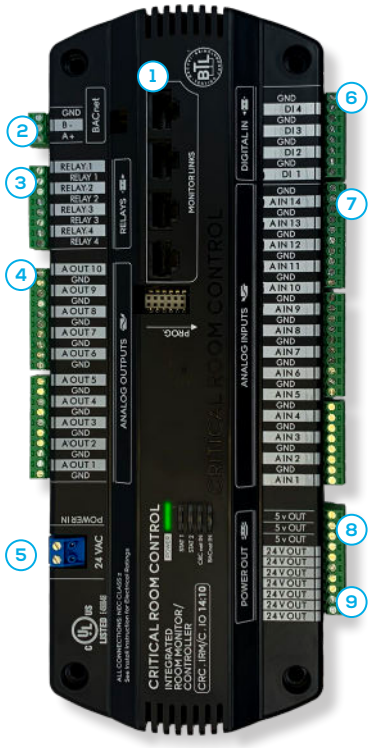
Dimensions	6.9 x 4.55 x 1.15 in.
Input Power	Supplied by I/O board via Cat6 cable
Cable Length	Up to 200 ft shielded Cat6 cable per display Up to 500 ft shielded Cat6 total for all connected displays
Operating Temperature	50 to 95 °F (10 to 35 °C)
Operating Humidity	0 to 95 % RH, non-condensing
Resolution	WVGA RGB 480 x 800 px
Display Type	Resistive touch

PRESSURE SENSOR SPECIFICATIONS

Input Voltage	5 VDC	
Output Voltage	0.5 to 4.5 VDC	
Accuracy	< ±1.0% of span	
Stability	< ±0.25% span/year	
Range	IRM-PM7	-0.1 to +0.1 "WC
	IRM-PM7x2S	-0.25 to +0.25 "WC

I/O BOARD SPECIFICATIONS

Dimensions	10.25 x 4 x 1.25 in
Input Power	24 VAC ± 10 %, 50/60 Hz, maximum 30 VA, Class 2
Onboard Power	5 @ 24 VDC (200 mA total max.) 3 @ 5 VDC (100 mA total max.)
Operating Temperature	32 to 158 °F (0 to 70 °C)
Storage Temperature	-40 to 158 °F (-40 to 70 °C)
Operating Humidity	10 to 70 % RH, non-condensing
Storage Humidity	10 to 70 % RH, non-condensing
Communication Protocol	BACnet® MS/TP (BTL - listed/tested)
Connectors	14 – 26 AWG wire
Listing	UL 916, C-UL, BTL
Manufactured Under	ISO 13485-2003



COMPONENTS

1 4 Display ports	6 4 Digital inputs (normally closed)
2 BACnet® MS/TP	7 14 Analog inputs (configurable 0 to 10 VDC)
3 4 Relays (normally closed, 2 A @ 30 VDC)	8 5 VDC power to sensors
4 10 Analog outputs (configurable 0 to 10 VDC)	9 24 VDC power to sensors
5 24 VAC power in	

IRM-PM5

ENC-WBA SPECIFICATIONS

Material of Construction	ABS Plastic
Flame Rating	UL94 HB
NEMA Rating	1

PICKUP PLATE SPECIFICATIONS

Material of Construction	Stainless steel with 60 micron brass mesh filter	
Pressure Connection	¼" brass barbed fitting	
Mounting	Single gang electrical box	
Pneumatic Tubing	¼" O.D.	
Operating Temperature	-4 to 140°F (-20 to 60°C)	
Storage Temperature	-40 to 158°F (-40 to 70°C)	
Operating Humidity	10-95% RH, non-condensing	
Range	IRM-PM7	-0.1 to +0.1 "WC
	IRM-PM7x2S	-0.25 to +0.25 "WC

WIRING GUIDELINES

PRESSURE	WHITE	0.5-4.5 VDC REFER TO SENSOR
GROUND	BLACK	GND
POWER	RED	5 VDC

Wire Connection	3 Conductor Stranded
Min Wire Gauge	22 AWG (0.6 mm)
Max Length	200 ft (61 m)
Preferred Color	Red/Black/White

⚠ The tubing for the HI port and LO port connections should be as short as possible, equal length and diameter, equal temperature and path.

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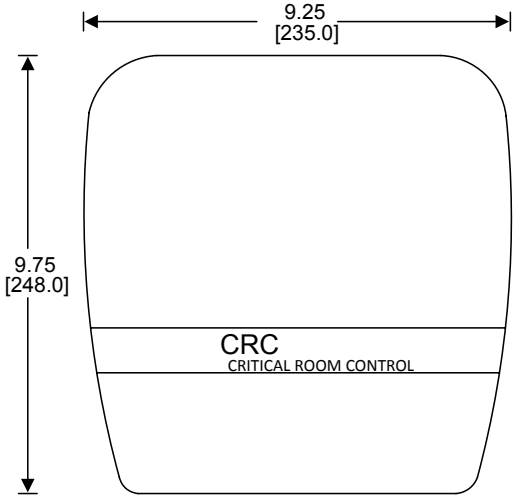
DIS-PM05 Dimensions

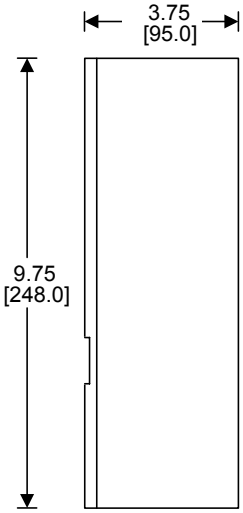
Front View

ENC-WBA Dimensions

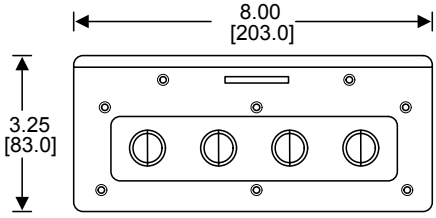
Front View



Side View

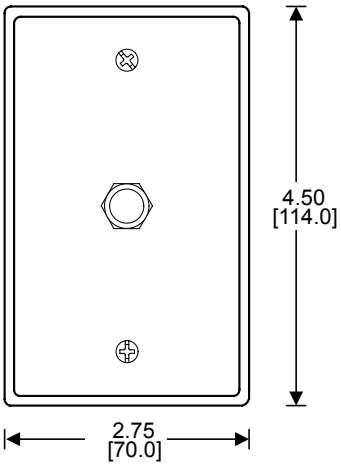


Bottom View



Pickup Plate Dimensions

Front View



Key
[BRACKETS] = MILLIMETERS (mm)
NO BRACKETS = INCHES (in)