

# PRESSURA™ MODEL RPM20 ROOM PRESSURE MONITOR

## Description

The Model RPM20 PRESSURA™ Room Pressure Monitor is designed to measure the pressure differential in hospital rooms using TSI's bi-directional pressure sensor with unmatched accuracy and stability. It features audible and visual alarms to warn of potential loss of containment and alarm delays with a door switch to avoid nuisance alarms. No Isolation Mode disables the alarms when the room is unoccupied.

## Features

- Meets CDC requiring visual room pressure alarm
- Stand-alone room pressure monitor verifies system operation
- Direct pressure measurement provides continuous monitoring
- Audible and visual alarms warn staff of unsafe conditions
- No Isolation Mode disables alarms when room is used for non-infectious patients or is unoccupied
- Passwords prevent unauthorized access to menu functions



## Rooms Monitored and Controlled

Max # of Rooms Monitored	3
Max # of Rooms Controlled	0

## Selection Chart

	RPM20	RPM20-LON
Includes TSI's High-Accuracy Through-The-Wall Sensor	•	•
Visual and Audible Alarms with Delays	•	•
Positive, Negative, and No Isolation Modes	•	•
Configurable Inputs and Outputs	•	•
BACnet® MS/TP Communications	•	
LonWorks® Communications		•
Modbus® Communications	•	
Compatible with TSI Nurse's Station Monitor	•	•

## Items Included

- Digital interface module
- Through-the-wall pressure sensor
- Sensor cable, 25 ft (7.6 m)

## Configurable Inputs

- 2<sup>nd</sup> Room Pressure Sensor
- Supply Flow or 3<sup>rd</sup> Room Pressure Sensor
- Door switch or Occupancy Sensor
- Keyswitch or Relative Humidity Sensor
- Door Switch or Room Temperature Sensor
- Keyswitch or Exhaust Flow

## Configurable Outputs

- Room Pressure or Flow Analog Output
- Low Alarm Relay Output
- High Alarm or Room Mode Relay Output

## Hardware Options

- Nurse's Station Remote Interface
- Remote audible alarm or audible/visual alarm
- Positive/negative/no isolation key switch
- Flow Station



## Main Screen Displayable Readings\*

- Room Pressure
- Supply Flow
- Exhaust Flow
- Air Change Rate
- Occupancy
- Door Open Status
- Room Mode

\* Inputs must be wired to PresSura monitor and configured

## Power Requirements

Digital Interface Module (DIM) Each	24VAC, 50/60 Hz, 3VA
Through the Wall Sensor Each	24VAC, 50/60 Hz, 3VA

## Digital Interface Module Specifications

Display Range	-0.20000 to +0.20000 in. H <sub>2</sub> O (-50 to +50 Pa)
Display Resolution	5% of reading 0.00001 in. H <sub>2</sub> O
Low Alarm Range	-0.19500 to +0.19500 in. H <sub>2</sub> O (-48.5 to +48.5 Pa)
High Alarm Range	-0.19500 to +0.19500 in. H <sub>2</sub> O (-48.5 to +48.5 Pa)
Touchscreen Display	4.3 in. (10.9 cm) diagonal 16:9 aspect ratio, QVGA
Communications	Modbus® BACnet® MS/TP LONworks (Optional)
Dimensions	7 in. x 4.875 in. x 1.75 in. (17.8 cm x 12.4 cm x 4.4 cm) 0.625 in. (1.6 cm) protrusion
Operating Temperature	32 to 120 °F (0 to 50 °C)
Weight	14 oz (0.40 kg)

Specifications subject to change without notice.

## Inputs

	Input 1	Input 2	Input 3	Input 4	Input 5	Input 6	Input 7
TSI Sensor	0 to 10 VDC <sup>1</sup>	0 to 10 VDC <sup>3</sup>	0 to 10 VDC <sup>2</sup>				
Pressure Transducer	0 to 10 VDC <sup>1</sup>	0 to 10 VDC <sup>3</sup>	0 to 10 VDC <sup>2</sup>				
Supply Flow			0 to 10 VDC <sup>1</sup>				
Door Switch				Open / Closed <sup>1</sup>		Open / Closed <sup>2</sup>	
Occupancy Sensor				Open / Closed <sup>1</sup>		Open / Closed <sup>2</sup>	
Keyswitch					Open / Closed <sup>1</sup>		Open / Closed <sup>2</sup>
Relative Humidity					0 to 10 VDC <sup>1</sup>		
Temperature						1000 Ω Platinum RTD <sup>1</sup>	
Exhaust Flow							0 to 10 VDC <sup>1</sup>

<sup>1</sup> Room 1

<sup>2</sup> Room 2

<sup>3</sup> Anteroom

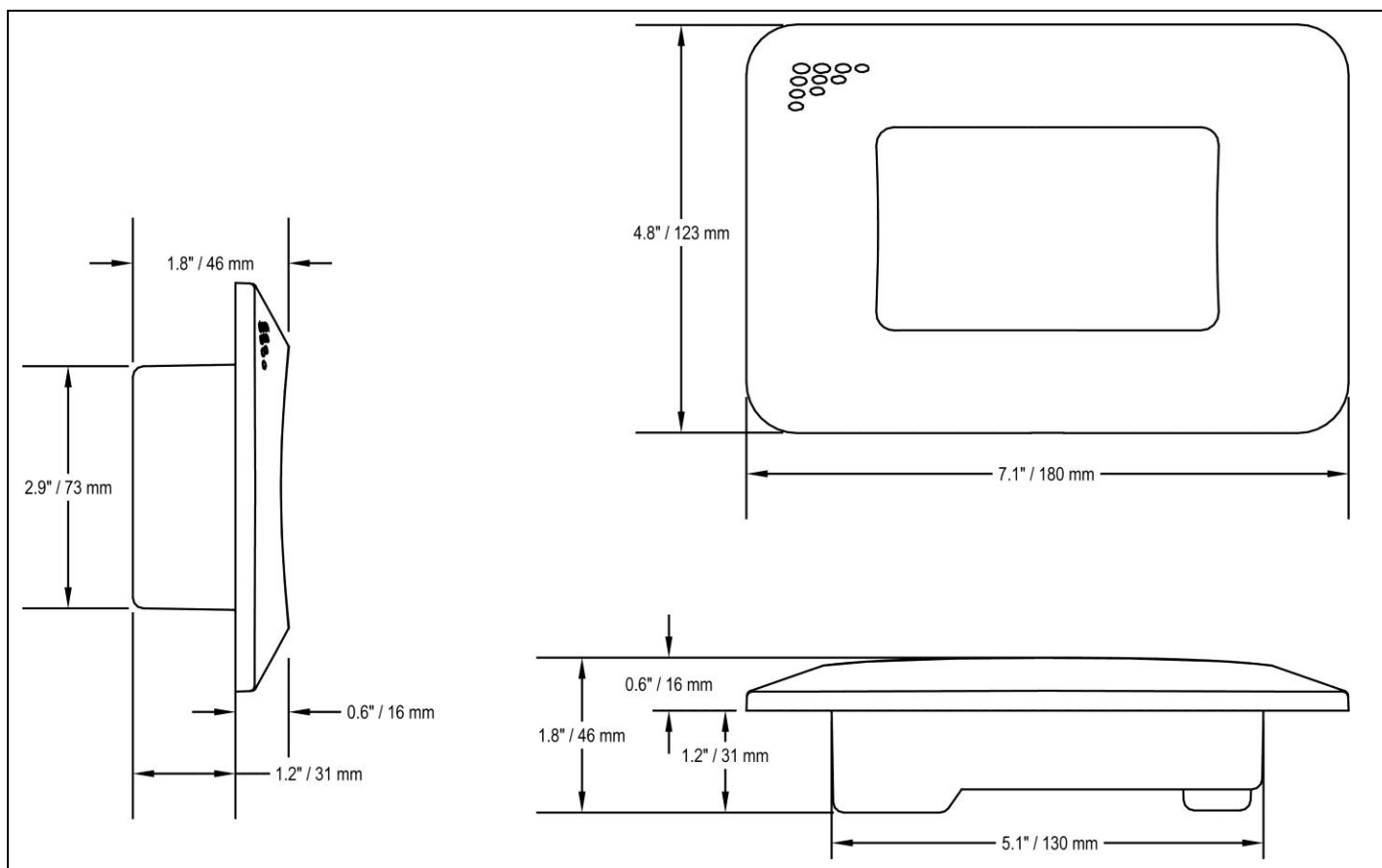
Outputs					
	Analog Output 1	Analog Output 2	Analog Output 3	Digital Output 1*	Digital Output 2*
Current Room Pressure		0 to 10 VDC / 4 to 20 mA <sup>1</sup>	0 to 10 VDC / 4 to 20 mA <sup>2</sup>		
Current Supply Flow			0 to 10 VDC / 4 to 20 mA		
Current Exhaust Flow		0 to 10 VDC / 4 to 20 mA	0 to 10 VDC / 4 to 20 mA		
Low Alarm Status				Open / Closed	
High Alarm Status					Open / Closed
Room Mode					Open / Closed

\*Digital Outputs close to indicate loss of power.

<sup>1</sup> Room 1

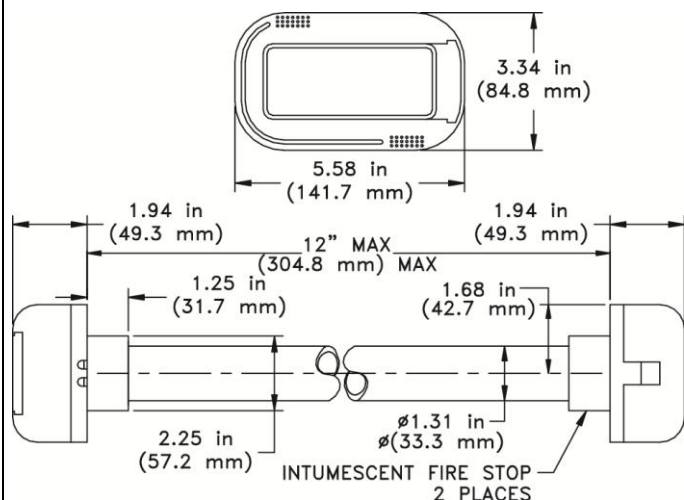
<sup>2</sup> Room 2

## Dimensions



## Sensor Specifications

<b>Range</b>	-0.20000 to +0.20000 in. H <sub>2</sub> O (-50 to + 50 Pa)
<b>Accuracy</b>	±10% of reading ±0.00001 in. H <sub>2</sub> O (±0.0025 Pa)
<b>Resolution</b>	5% of reading
<b>Temp. Comp. Range</b>	55 to 95°F (12.7 to 35°C)
<b>Power</b>	0.16 W at 0 in. H <sub>2</sub> O
<b>Dissipation</b>	0.20 W at 0.00100 in. H <sub>2</sub> O (0.25 Pa)
<b>Size (H x W x D)</b>	3.34 in. x 5.58 in. x 1.94 in. (84.8 x 141.7 x 49.3 mm)
<b>Weight</b>	0.2 lb (0.1 kg)



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<b>USA</b>	<b>Tel:</b> +1 800 874 2811	<b>India</b>	<b>Tel:</b> +91 80 67877200
<b>UK</b>	<b>Tel:</b> +44 149 4 459200	<b>China</b>	<b>Tel:</b> +86 10 8219 7688
<b>France</b>	<b>Tel:</b> +33 1 41 19 21 99	<b>Singapore</b>	<b>Tel:</b> +65 6595 6388
<b>Germany</b>	<b>Tel:</b> +49 241 523030		