



Knowledge Beyond Measure.

PresSura™ Room Pressure Monitors and Controllers

Models RPM10, RPM20 and RPC30



TSI® PresSura™ Room Pressure Monitors and Controllers help provide safety in isolation rooms, operating rooms, and other specialized spaces, by continually measuring room pressure and indicating room conditions.

The PresSura™ products assist hospitals and engineers to comply with relevant ASHRAE, AIA, CDC and USP standards. TSI's unique thermal-based pressure sensor offers the most precise, accurate, and stable measurement. Over 50,000 hospital rooms in leading healthcare facilities rely on TSI® products every day to provide effective 24/7 monitoring.

Applications

- Isolation Rooms (All & PE)
- Operating Rooms (ORs)
- Compounding Pharmacies
- Pandemic Preparedness Rooms
- Intensive Care Units
- Laboratories and Vivariums
- Burn Units
- Bronchoscopy Suites
- Laundry Areas, Food Prep, Construction

Options

- Basic monitoring of a single room
- Monitor up to two critical rooms plus an anteroom
- Control one room while monitoring an anteroom
- Monitor or control:
 - Temperature
 - Relative humidity
 - Airflow with ACH calculations
 - Door switch
 - Occupancy sensor
- Nurse's remote station to simultaneously monitor up to eight rooms

Features and Benefits

- Accurate room pressure differential measurement for safety and standards compliance
- Industry-leading sensor accuracy within ± 0.00001 in H_2O
- 4.3 in. flush-mounted color touchscreen
- Intuitive interface for simplified programming and monitoring
- Seamless integration to BAS via BACnet® MS/TP, LonWorks®, and Modbus® communications
- Digital interface module has audible and visual alarms to alert users of unsafe conditions
- Multiple levels of password protection provides secure access to controller functions
- No isolation mode disables alarms when room is used for non-infectious patients or is unoccupied
- Optional remote keyswitch allows for secure switching of room modes
- Onboard diagnostics assist with HVAC troubleshooting
- Partner controllers with a fast-acting actuator for immediate response to prevent alarms
- Plug-in terminal strips for fast and accurate wiring installation
- Mounts in a standard depth electrical box to easily fit within a typical framed wall



Specifications

PresSura™ Room Pressure Monitors and Controllers

Bi-Directional Through-the-Wall Sensor

Range	-0.20000 to +0.20000 in H ₂ O (-49.8 Pa to +49.8 Pa)
Accuracy	±10% of reading ±0.00001 in H ₂ O (±0.0025 Pa)
Resolution	5% of reading
Temperature Compensation	
Range	55 to 95°F (13 to 35°C)

Alarms

Low Alarm	-0.19500 to +0.19500 in H ₂ O (-48.6 Pa to +48.6 Pa)
High Alarm	-0.19500 to +0.19500 in H ₂ O (-48.6 Pa to +48.6 Pa)

Touchscreen Display

Size	4.3 in. (10.9 cm) diagonal
Resolution	QVGA

Dimensions

7 in. x 5.875 in. x 1.75 in. (17.8 cm x 14.9 cm x 4.4 cm)	
Protrusion from wall	0.625 in. (1.6 cm)
Mounts to triple-gang standard depth electrical box	

Inputs

Temperature	1000-ohm platinum RTD
Temperature Setpoint	0-10 VDC
Relative Humidity	0-10 VDC
Supply Flow	0-10 VDC
Exhaust Flow	0-10 VDC
Remote Keypad	Open/Closed Signal
Pressure Transducer	0-10 VDC
Room Pressure Sensor	0-10 VDC
Door Switch	Open/Closed Signal
Room Occupancy	Open/Closed Signal

Optional Analog Output

(1) Flow or Room Pressure Differential	0-10 VDC or 4-20 mA
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Optional Control Outputs

(1) Supply	0-10 VDC
(1) Exhaust	0-10 VDC
(1) Temperature	0-10 VDC or 4-20 mA

Contact Outputs

Low Alarm and High Alarm / Room Mode	
SPST (NO)	
Max Current	2 A
Max Voltage	220 VDC/250 VAC

Communications Protocols

BACnet® MS/TP, Modbus®, Lonworks®

Input Power

24 VAC, 50/60 Hz
15-40 VDC
5 Watt Maximum

Operating Temperature

32 to 120°F (0 to 49°C)

Weight

14 oz (0.40 Kg)

Specifications are subject to change without notice.

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Model	Maximum # Rooms Monitored	Maximum # Rooms Controlled	Configurable Room Modes	Visual and Audible Alarms with Delays	Alarm Relay Contacts	Controls Supply, Exhaust, and Temperature	Accepts Flow Input/ACH	Door Switch Input	Temperature Input	RH Input	BACnet® MS/TP Modbus Compatible	LonWorks® Compatible	Compatible with TSI® Nurse's Station Monitor
RPM10	1	N/A	▪	▪	▪	▪	◻	◻	◻	◻	▪	◻	▪
RPM20	3	N/A	▪	▪	▪	▪	◻	◻	◻	◻	▪	◻	▪
RPC30	1	1	▪	▪	▪	▪	◻	◻	◻	◻	▪	◻	▪



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