PRESSURA ROOM
PRESSURE MONITORS
AND CONTROLLERS

TSI PresSura™ Healthcare Room Pressure products 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 (AII & 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
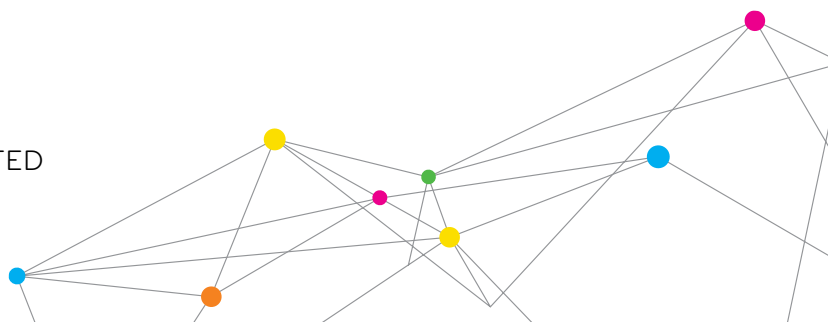+ Basic monitoring of a single room
+ Monitor up to two critical rooms plus an anteroom
+ Control one room while monitoring an anteroom
+ Monitor or control:
  - Temperature
  - Relative humidity
  - Airflow with ACH calculations
  - Door switch
  - Occupancy sensor
+ Nurse's remote station to simultaneously 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

UNDERSTANDING, ACCELERATED

PRESSURA ROOM PRESSURE MONITORS AND CONTROLLERS

Bi-Directional Through-the-Wall Sensor

Range	-0.20000 to +0.20000 in H_2O (-49.8 Pa to +49.8 Pa)
Accuracy	±10% of reading ±0.00001 in H_2O (±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_2O (-48.6 Pa to +48.6 Pa)
High Alarm	-0.19500 to +0.19500 in H_2O (-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 Keyswitch	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

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)

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	+	+	+		o	o			+		+
RPM20	3	N/A	+	+	+		o	o	o	o	+	o	+
RPC30	1	1	+	+	+	+	o	o	o	o	+	o	+

+ Standard   o Optional

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