PRESSURA™ MODEL RPC30
ROOM PRESSURE CONTROLLER

Description

The Model RPC30 PresSura™ Room Pressure Controller is designed to measure and control the pressure differential in hospital rooms using TSI's unique, 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 controller verifies system operation
- 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	1
Max # of Rooms Controlled	1

Selection Chart

	RPC30	RPC30-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

- 2nd Room Pressure Sensor or Temperature Setpoint
- Supply flow
- Door switch or Occupancy Sensor
- Keyswitch or Relative Humidity Sensor
- Door Switch or Room Temperature Sensor
- Keyswitch, Exhaust Flow or Supply Air Temperature Sensor

Configurable Outputs

- Exhaust Control Output
- Supply Control or Room Pressure Analog Output
- Temperature Control, Room Pressure, Supply Flow or Exhaust 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
- Dampers or Venturi Valves
- Flow Stations

Main Screen Displayable Readings*

- Room Pressure
- Supply Flow
- Exhaust Flow
- Air Change Rate
- Temperature
- Supply Air Temperature
- Relative Humidity
- Occupancy
- Door open status
- Room mode

* Inputs must be wired to PresSura controller 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_2O (-50 to +50 Pa)
Display Resolution	5% of reading 0.00001 in. H_2O
Low Alarm Range	-0.19500 to +0.19500 in. H_2O (-48.5 to +48.5 Pa)
High Alarm Range	-0.19500 to +0.19500 in. H_2O (-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[1]	0 to 10 VDC[2]					
Pressure Transducer	0 to 10 VDC[1]	0 to 10 VDC[2]					
Temperature Setpoint		0 to 10 VDC[1]					
Supply Flow			0 to 10 VDC[1]				
Door Switch				Open / Closed[1]		Open / Closed[2]	
Occupancy Sensor				Open / Closed[1]		Open / Closed[2]	
Keyswitch					Open / Closed[1]		Open / Closed[2]
Relative Humidity					0 to 10 VDC[1]		
Temperature						1000 Ω Platinum RTD[1]	
Exhaust Flow							0 to 10 VDC[1]
Supply Air Temperature							1000 Ω Platinum RTD

[1] Room 1, [2] Anteroom

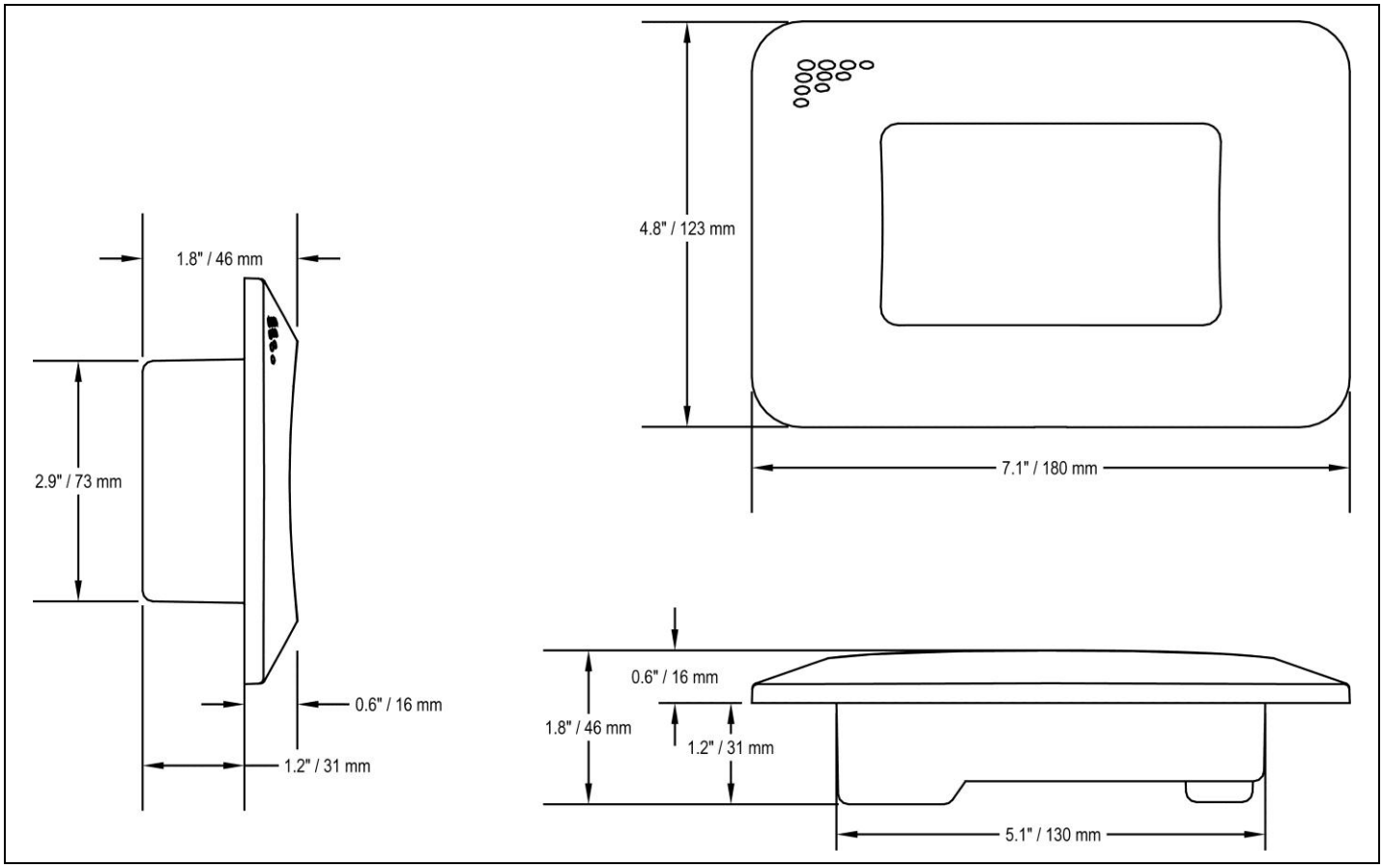
Outputs

	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[1]	0 to 10 VDC / 4 to 20 mA[2]		
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		
Exhaust Control	0 to 10 VDC[1]				
Supply Control		0 to 10 VDC / 4 to 20 mA			
Temperature Control			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.

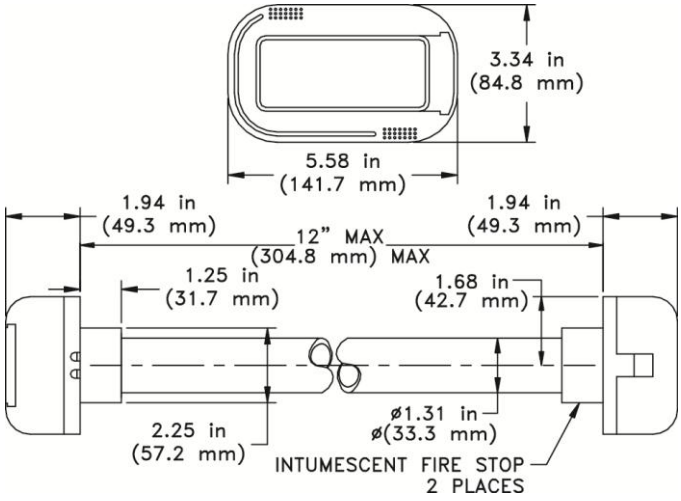
[1] Room 1
[2] Anteroom

Dimensions



Sensor Specifications

Range	-0.20000 to +0.20000 in. H_2O (-50 to + 50 Pa)
Accuracy	±10% of reading ±0.00001 in. H_2O (±0.0025 Pa)
Resolution	5% of reading
Temp. Comp. Range	55 to 95˚F (12.7 to 35˚C)
Power Dissipation	0.16 W at 0 in. H_2O 0.20 W at 0.00100 in. H_2O (0.25 Pa)
Size (H x W x D)	3.34 in. x 5.58 in. x 1.94 in. (84.8 x 141.7 x 49.3 mm)
Weight	0.2 lb (0.1 kg)



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