

SRPM Secure-Sense® Setra Room Pressure Monitor



setra®

 **BACnet®**

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Setra's Model SRPM Room Pressure Monitor, available with optional BACnet® network capability for integration in building automation control systems, is designed for critical low differential pressure applications that require stringent pressure monitoring and alarming. The SRPM can be configured to monitor the positive or negative airflow in protected environments and hospital isolation rooms per CDC guidelines.

The SRPM is a complete system that includes a convenient backlit RGB LCD display with an intuitive graphic user interface for pressure, security, calibration, and alarm setup. The convenient touch-screen allows finger-tip access to menus that guide the user through setup. Visual Red and Green LEDs and a local audible alarm, with a time delay feature to prevent nuisance alarms, alert personnel to system status. The SRPM also features a SPST relay output for remote indication of system status.

True differential pressure is measured and displayed with 0.001 inches of water column resolution. Additional features include multiple selectable analog outputs, output and display averaging and door status indication.

REMOTE ANNUNCIATOR

Setra's SRAN annunciator allows remote indication of room status at monitoring or nurses station. A GREEN LED indicates a normal room condition, a RED LED and audible alarm signal a breach in room pressure status.



Model SRPM Specifications

Performance Data

	Code V	Code E
Accuracy RSS* (at constant temp)	±0.25%	±0.5%
Non-Linearity (BFSL Based)	±0.24%	±0.49%
Hysteresis	±0.05%	±0.05%
Non-Repeatability	±0.05%	±0.05%
Zero Setting Tolerance	±0.5% FS	±0.5% FS
Span Setting Tolerance	±0.5% FS	±0.5% FS

Thermal Effects**

Compensated Range °F(°C)	±0.03% FS(±0.05% FS)
Overpressure	±1 PSI

*RSS of Non-Linearity, Non-Repeatability and Hysteresis.

**Units calibrated at nominal 70°F. Maximum thermal error computed from this datum.

Environmental Data

Temperature	
Operating °F (°C)	32 to +120 (0 to +50)
Storage °F (°C)	-20 to +160 (-30 to +70)
Operating Humidity	5 to 95% RH (Non-condensing)

*Operating temperature limits of the electronics only.

Physical Description

Case	Fire Retardant Plastic (NEMA 1 Rated for Indoor Applications)
Dimensions	8"H x 5.4"W x 1/8"D (20.3 x 13.7 x 4.1 cm)
Electrical Connection	Removable Terminal Block
Pressure Fittings	Barbed Fittings for 1/4" Tubing
Weight (approx.)	1.5 lbs (680g)
Mounting	4 x 4 Plaster Ring (Mounts to double gang electrical box.)

Communications Option

BACnet®	MS/TP ASC
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Specifications are subject to change without notice.

Display

LCD	128 x 128, RGB Backlit
Status Indicators	Green LED, Normal Red LED, Alarm Backlit LCD

Electrical Data (Voltage)

Circuit	3-Wire (Exc., Out, Com)
Output*	0 to 5 VDC 0 to 10 VDC

Excitation	
Code V1	85-265 VAC, 50-60 Hz
Code A1	18- 32 VAC, 50-60 HZ
Code V2	85-265 VAC, BACnet®
Code A2	18-32 VAC, BACnet®
Power Consumption	5 W
Alarm Output	SPDT Relay 1A @24 VDC 1A @ 120 VAC

*Calibrated into a 50K ohm load, operable into a 5000 ohm load or greater.

Electrical Data (Current)

Circuit	2-Wire
Output	4 to 20 mA
External Load	0 to 510 ohms

Excitation	
Code V1	85-265 VAC, 50-60 Hz
Code A1	18- 32 VAC, 50-60 HZ

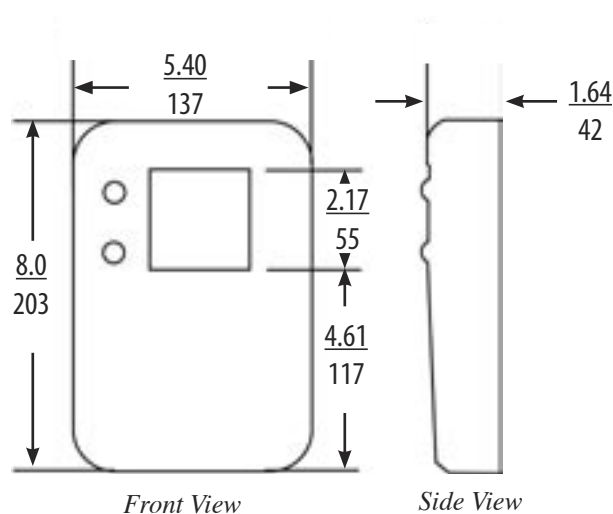
Pressure Media

Air or Non-conductive, Non-explosive Gases.

Certifications

CSA Standard C22.2 No 0-M 91	- General Requirements - Canadian Electrical, Part 1
CAN/CSA C22.2 No. 0.4-04	- Bonding of Electrical Equipment
CAN/CSA-C22.2 No. 61010-1-04	-Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use Part-1: General Requirements
ANSI/UL61010-1 (Second Edition)	- Safety Requirements for Electrical Equipment for Measurement, Control

SRPM Outline Drawing



in.
mm

Applications

- Hospital Patient Isolation Wards
- Pharmaceutical Manufacturing
- Semiconductor Fabs
- Cleanrooms
- Research Laboratories
- Animal Resource Facilities

Features

- Touch Screen Display
- BACnet® Capable **NEW** Option
- Password Enabled
- Local Audible Alarm
- Visual Red and Green Room Status Displays
- SPST Alarm Relay
- Door Status Monitor
- Variable Alarm Delay
- Positive and Negative Pressure Monitoring
- Bar Graph Display
- CE and RoHS Compliant

Benefits

- ◆ Easy to Install, Set-up, and Calibrate
- ◆ Fingertip Operation
- ◆ Password Security

When it comes to a product to rely on - choose the Model SRPM. When it comes to a company to trust - choose Setra.

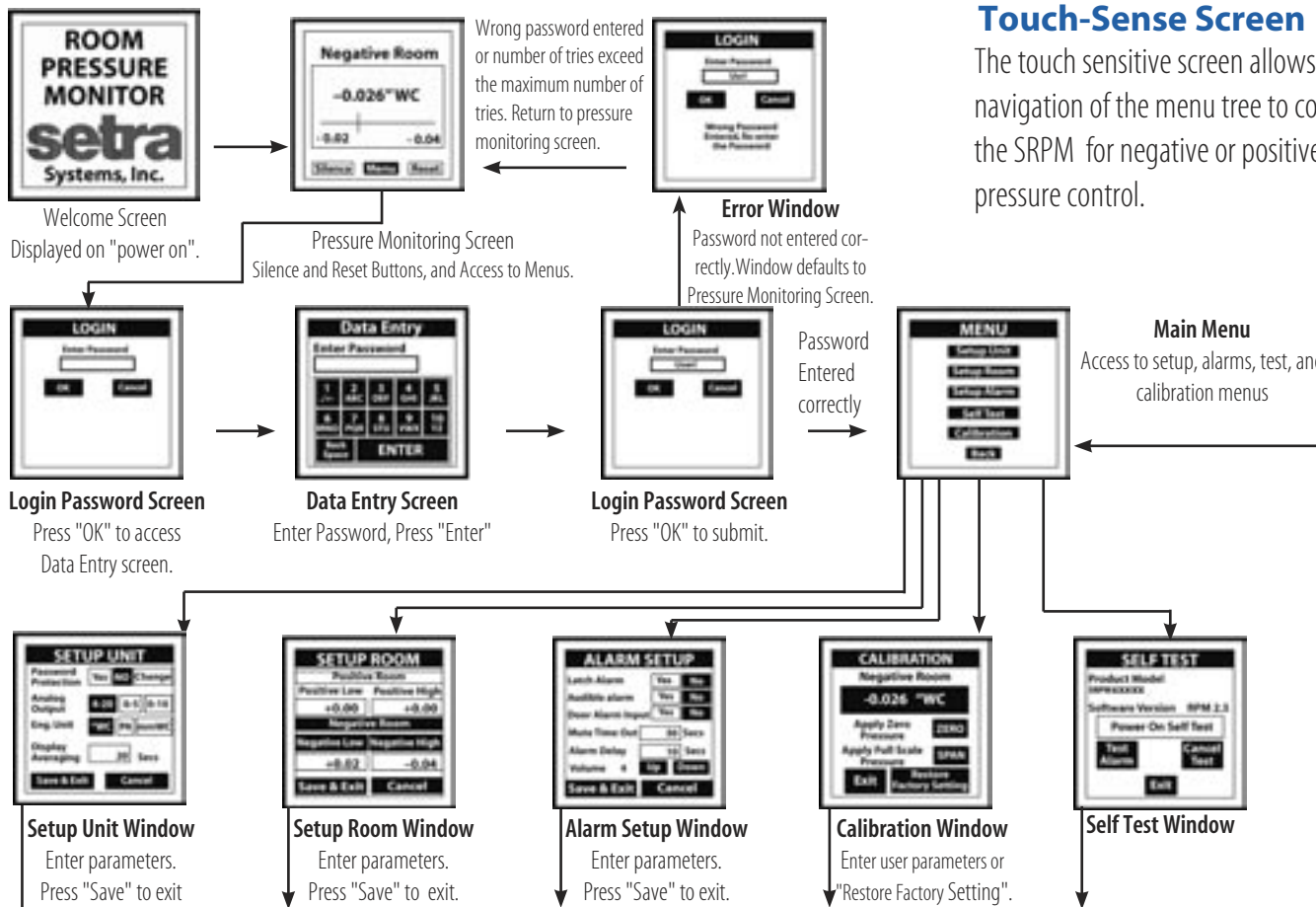


Visit Setra Online:
<http://www.setra.com>

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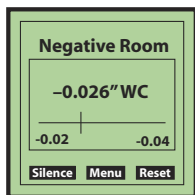
SRPM MENU TREE



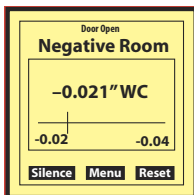
Touch-Sense Screen

The touch sensitive screen allows easy navigation of the menu tree to configure the SRPM for negative or positive room pressure control.

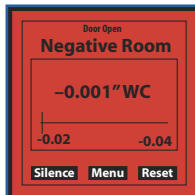
Warning and Alarm Condition Windows



If pressure is Normal the screen is Green.



If pressure is Normal and Door is open the screen is Yellow.



If pressure falls outside of preset limits (Alarmed State), the screen is Red.

ORDERING INFORMATION

Code all blocks in table.

Example: Part No. SRPM005WBA1E for a SRPM, ±5 in. W.C. Range, 24VAC Exc. with 4 to 20 mA output, and ±0.5% FS Accuracy.

Model SRPM

S	R	P	M	—	□	□	□	□	—	□	□	—	E
Model					Range					Excitation/Output			Accuracy
SRPM = SRPM					Bidirectional					A1 = 24 VAC/4-20 mA or 0-5 and 0-10 VDC			E = ±0.5% FS V = ±0.25% FS
					005WB = ±5 in. W.C.					V1 = 120/240 VAC/4-20 mA or 0-5 and 0-10 VDC			
					2R5WB = ±2.5 in. W.C.					A2 = 24 VAC w/ BACnet®			
					001WB = ±1.0 in. W.C.					V2 = 120/240VAC BACnet®			
					0R5WB = ±0.5 in. W.C.								
					R25WB = ±0.25 in. W.C.								
					0R1WB = ±0.1 in. W.C.								
					R05WB = ±0.05 in. W.C.								

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Please contact factory for versions not shown.

Accessories



Model SRAN
Remote Annunciator
Green LED, Normal Indication
Red LED, Alarm Indication
Buzzer, Audio Alarm, ADJ. from SRPM
Acknowledge Switch

Order Part Number **S R A N**



Model RPS
Room Pressure Snubber
(Wall Mount Pressure Taps)
The RPS is a stainless steel room static pressure sensor that has the same footprint (2.75" W X 4.5" H) as your standard electrical wall plate. electrical box.

Order Part Number **R P S**

While we provide application assistance on all Setra products, both personally and through our literature, it is up to the customer to determine the suitability of the product in the application.

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