

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%	$\pm 0.5\%$
Non-Linearity (BFSL Based)	±0.24%	$\pm 0.49\%$
Hysteresis	$\pm 0.05\%$	$\pm 0.05\%$
Non-Repeatability	$\pm 0.05\%$	$\pm 0.05\%$
Zero Setting Tolerance	±0.5% FS	±0.5% FS
Span Setting Tolerance	±0.5% FS	±0.5% FS

Thermal Effects\*\*

Compensated Range °F(°C)  $\pm 0.03\%$  FS ( $\pm 0.05\%$  FS) Overpressure  $\pm 1 PSI$ 

 $\pm$ 15" W.C. for  $\pm$ 0.1 and  $\pm$ 0.05 in W.C.

#### **Environmental Data**

Temperature

Operating\* °F (°C) 32 to + 120 (0 to + 50)Storage °F (°C) -20 to + 160 (-30 to + 70)5 to 95% RH (Non-condensing) Operating Humidity \*Operating temperature limits of the electronics only.

## **Physical Description**

Case	Fire Retardant Plastic
	(NEMA 1, IP20 Rated for Indoor Applications)
Dimensions	8 "H x 5.1"W x 1.8"D
	(203 x 130 x 46 mm)

**Electrical Connection** Removable Terminal Block Pressure Fittings Barbed Fittings for 1/4" O.D. 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

Specifications are subject to change without notice.

## Display

Output\*

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

## **Electrical Data (Voltage)**

	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®

5 W Power Consumption Alarm Output SPDT Relay 1A @24 VDC

1A @ 120 VAC

3-Wire (Exc., Out, Com)

0 to 5 VDC

\*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

## **Applications**

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

## **Features**

- Touch Screen Display
- BACnet® 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
- ◆ Local Display of Room

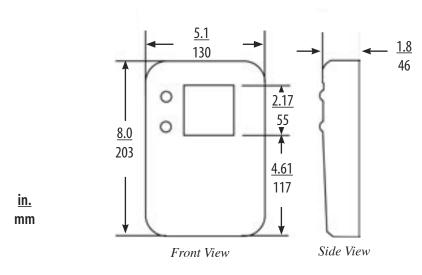
When it comes to a product to rely on - choose the Model SRPM. When it comes to a company to trust - choose Setra.



800-257-3872

**Visit Setra Online:** http://www.setra.com

# **SRPM Outline Drawing**

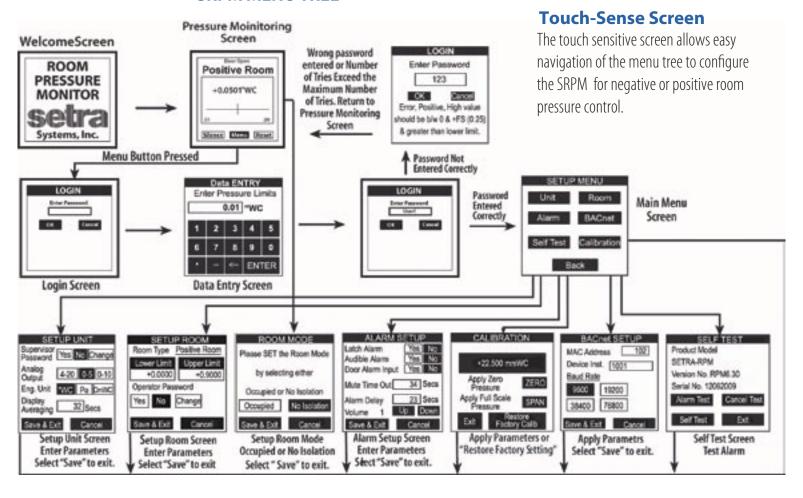




<sup>\*</sup>RSS of Non-Linearity, Non-Repeatability and Hysteresis.

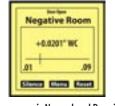
<sup>\*\*</sup>Units calibrated at nominal 70°F. Maximum thermal error computed from this datum

## SRPM MENU TREE





If pressure is Normal. the screen is Green.



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

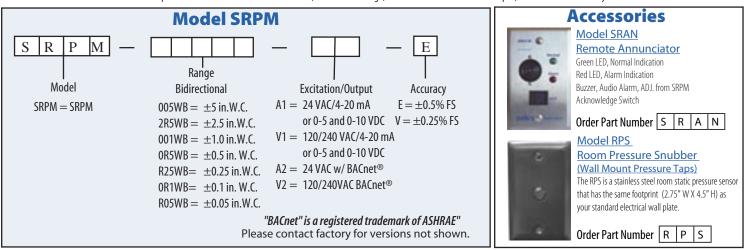


If pressure falls outside of preset limits (Alarmed State), the screen is Red.

## ORDERING INFORMATION

Code all blocks in table.

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



While we provide application assistance on all Setra products, both

SSP SRPM Rev. C 02/11/2010