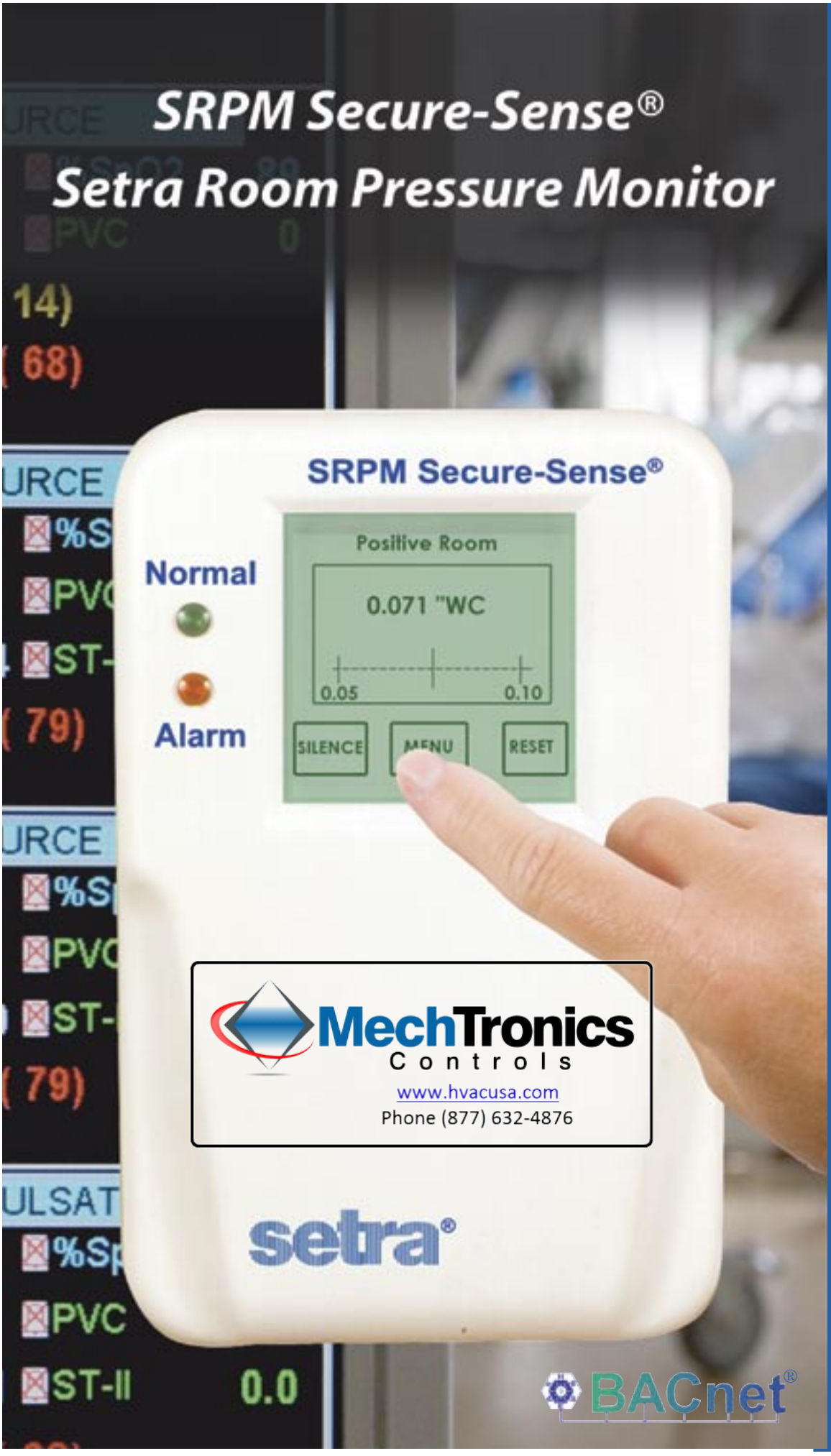
SRPM Secure-Sense®
Setra Room Pressure Monitor



Applications

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

Features

- Touch Screen Display
- BACnet® Option NEW
- 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.

setra

ISO-9001 Certified

800-257-3872

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

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
	±15" W.C. for ±0.1 and ±0.05 in W.C.

*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 , 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

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

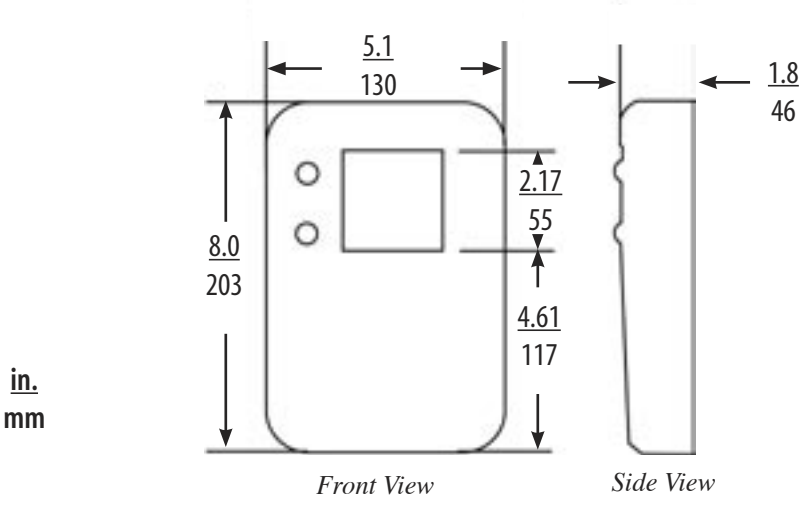
Pressure Media

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



BACnet®

"BACnet" is a registered trademark of ASHRAE"

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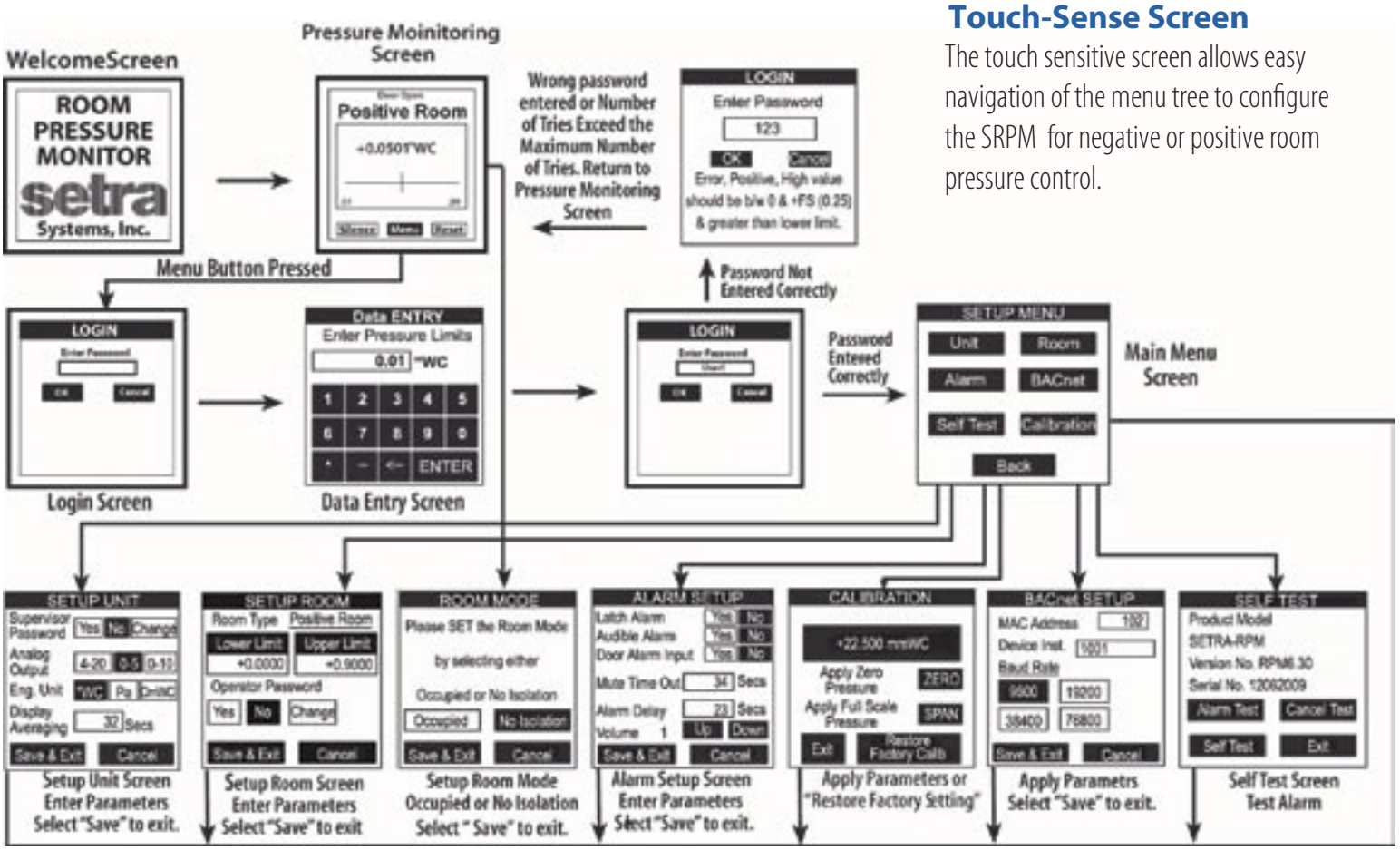
SRPM MENU TREE



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.

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.

MechTronics Controls
www.hvacusa.com
Phone (877) 632-4876

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
SRPM = SRPM

Range Bidirectional
005WB = ±5 in.W.C.
2R5WB = ±2.5 in.W.C.
001WB = ±1.0 in.W.C.
0R5WB = ±0.5 in. W.C.
R25WB= ±0.25 in.W.C.
0R1WB= ±0.1 in. W.C.
R05WB = ±0.05 in.W.C.

Excitation/Output
A1 = 24 VAC/4-20 mA or 0-5 and 0-10 VDC
V1 = 120/240 VAC/4-20 mA or 0-5 and 0-10 VDC
A2 = 24 VAC w/ BACnet®
V2 = 120/240VAC BACnet®

Accuracy
E = ±0.5% FS
V = ±0.25% FS

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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.
Order Part Number R P S

SSP SRPM Rev. C 02/11/2010

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.

159 Swanson Road, Boxborough, Massachusetts 01719/Tel: 800-257-3872;
Fax: 978-264-0292; Email: sales@setra.com; Web: www.setra.com