Model SRCM

Room Pressure and Condition Monitor

setra

NOTE: Setra quality standards are based on ANSI-Z540-1.
The calibration of this product is NIST traceable.

U.S. Patent nos. 6019002; 6014800

DESCRIPTION

In a hospital, laboratory or animal research facility, the integrity of the ventilation control system is at the heart of a contaminant free environment. Whether a room is to be maintained at a negative pressure to prevent contaminants from escaping into adjacent areas or positive pressure to protect patients with compromised immune systems, the proper pressurization of the room is essential. To assure proper pressurization is maintained in these critical environments, a room pressure monitor is employed to measure and alert staff and personnel of any change in pressure—no matter how small. A fail-safe solution to monitoring these very low pressure changes is Setra's Model SRCM room pressure monitor, which utilizes highly accurate capacitance sensing technology to measure and display true low pressure differential.

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FEATURES

■ **True Pressure Measurement**
• High accuracy Setra low differential technology
• Dead ended solution —no contamination or clogging
• Standard on-board sensor and optional remote sensor

■ **Display 4 Ambient Parameters**
• Pressure, Temperature, Humidity, User-Defined (ex., CO2, LUX)

■ **Flush Mount Design**
• No visible mounting fasteners
• Snap-in flush bezel
• Face is sealed for cleaning or wipe-down

■ **Full Banner Feature**
• Utilize same monitor for room condition
• Clearly display condition with facility specific nomenclature

■ **Clone Feature**
• Display rotates up for access to USB port
• On-board USB port—cloning of configurations
    for multiple unit installation

■ **BACnet® Communications**
• Installed or field upgrade for in-situ installation
• BACnet• MSTP/ASC
• All setups configurable through touch screen display

■ **Alarm Capabilities**
• Local Audible and Visual alarming
• Remote annunciator alarming capability
• Alarm delay feature—prevent nuisance alarms

■ **Ease of Installation**
• Mounts in off-the-shelf electrical gang box
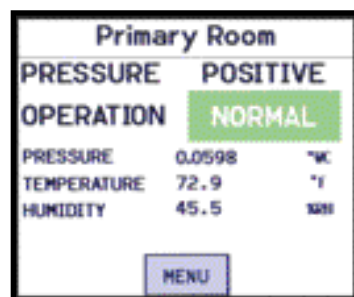• 4-screw self leveling mount

Setra's "2 in 1" Solution
The Environment is Critical, the Control is Easy
Ambient Parameters

SRCM
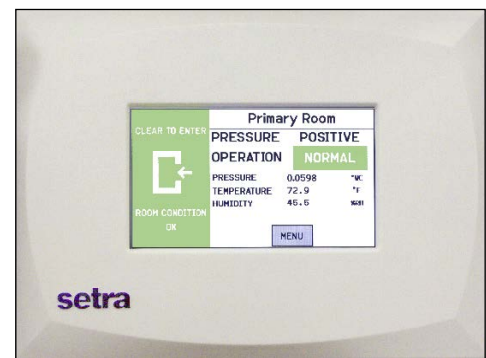
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Model SRCM
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Attractive, Intuitive, and Configurable Design

Simultaneously Monitor and Display 4 Parameters Per Room (up to 2 rooms)

Selectable Room Condition Banners

1/3 Screen Banners

Display 4 Ambient Parameters (slide bar off)
Pressure, Temperature, Humidity, and User-Defined Parameter

Full Sceen Banners

Room I.D.
Customer Configurable Feature - Customize Room Name

Room Pressure Mode
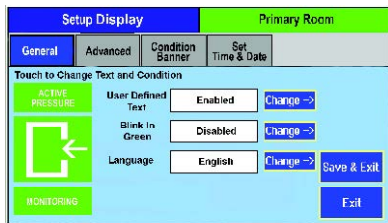Display Positive, Negative, or Neutral Mode of Room

Room Pressure Status
Visual Indication of Normal, Warning, and Alarm Condition

Displayed Pressure
Displays Room Pressure in User Selectable Units

Pressure Slide Bar On
Graphic Display of Pressure Reading
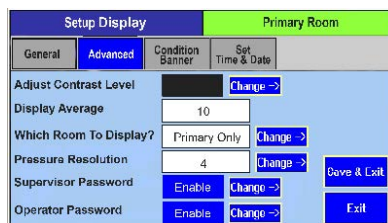Relative to Alarm Setpoints

Setup Menu
Password Protected Entry to Menu Structure
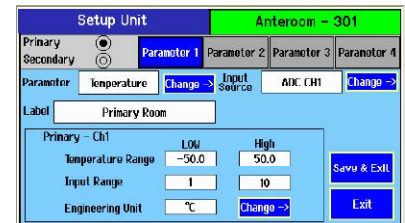

Fingertip Access for Easy Setup

Setup Display Banner
• User Defined Text: Free form data entry for room name
• Room Status: Change room from Isolation to No Isolation

Setup Display Advanced
• Display Contrast: Change brightness of display
• Display Averaging: Improve display resolution in unstable
  ambient pressure environments
• Display Ambient Parameters: Display primary and
  secondary rooms or toggle between 2 rooms
• Enable Password: Administrator and Supervisor

Setup Unit Operation
• Setup primary and secondary room
• Change analog output
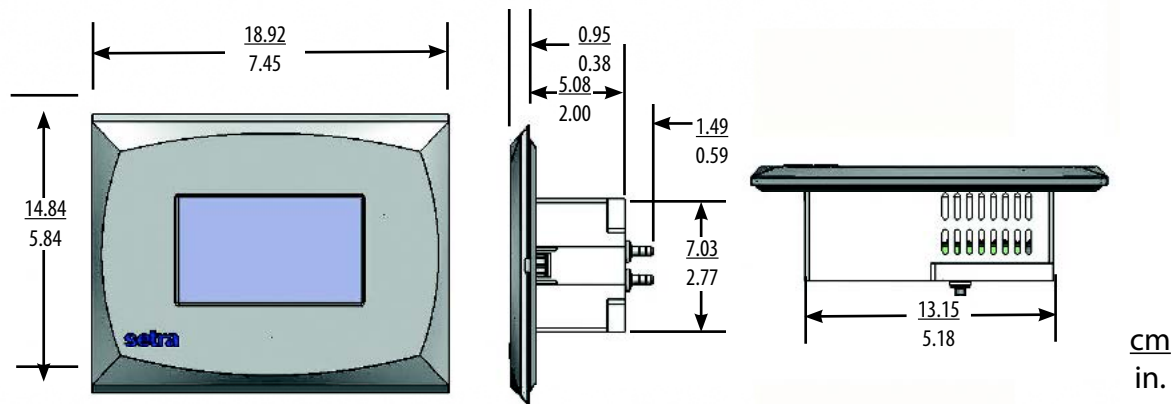• Free form data entry for room name
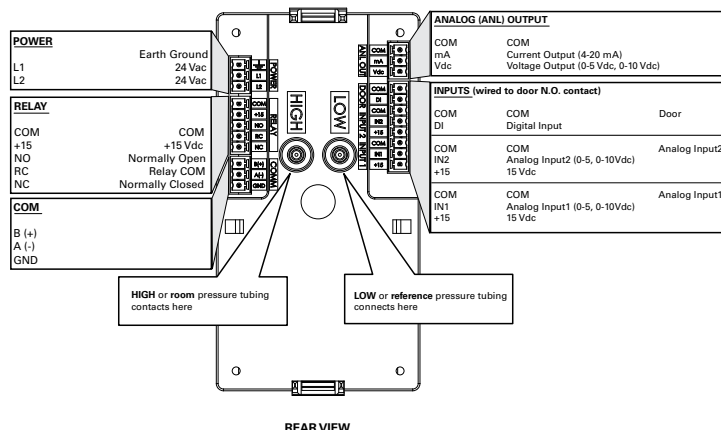
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SPECIFICATIONS

Performance Data				Environmental Data		Electrical Data (Voltage)	
	Code F	Code H		Operating[3] Temperature °F (°C)	32 to + 120 (0 to +50)	Circuit	3-Wire (Exc, Out, Com),
Accuracy RSS[1] (at constant temp)	±0.25% FS	±0.5%		Storage Temperature °F (°C)	-20 to +160 (-30 to +70)	Output[4]	0 to 5 VDC, 0 to 10 VDC
Non-Linearity (BFSL based)	±0.24%	±0.49%		Operating Humidity	5 to 95% RH (non-condensing)	Excitation	18-32 VAC, 50-60 HZ
Hysteresis	±0.05%	±0.05%		**Physical Description**		Power Consumption	10 W max., 3 W typ.
Non-Repeatability	±0.05%	±0.05%		Case	Fire Retardant Plastic UL94 V-0	Alarm Output	SPDT Relay: 0.6A @ 120 VAC, 2A @ 30 VDC
Zero/Span Tolerance	±0.05% FS	±0.05% FS		Dimensions	5.84"H x 7.45"W x 0.38"D (14.84 x 18.92 x 0.95 cm)	**Electrical Data (Current)**	
Pressure Media				Electrical Connection	Removable Terminal Block	Circuit	2-Wire
Air or Non-Conductive, Non-Explosive Gases.				Pressure Fittings	Barbed Fittings for 1/4" O.D. Tubing	Output	4 to 20 mA
Certifications				Weight (approx.)	1 lb. 3.2 ounces (554 grams)	External Load	0 to 510 ohms
CE	Electro-Magnetic Compatibility Directive 2004/108/EC Low-Voltage Directive 2006/95/EC RoHS Directive 2011/65/EC			Mounting	Mounts to a triple gang double-deep electrical box	Excitation	18-32 VAC
				Communications Option		**Thermal Effects[2]**	
CSA	CAN/CSA - C22.2 No. 61010-1-04 ANSI/UL 61010-1, 3rd Edition			BACnet®	MS/TP ASC	Compensated Range °F (°C)	±0.03% FSI (±0.05% FS)
				Display		Overpressure	±1 PSI (15"W.C. for ≤ 0.10"W.C. F.S.)
				LCD	4.3" TFT, 480 x 272, Dimmable		

[1] RSS of Non-Linearity, Hysteresis, and Non-Repeatability.
[2] Units calibrated at nominal 70° F. Maximum thermal error computed from this datum.
[3] Operating Temperature limits of the electronics only.
[4] Calibrated into a 50K ohm load, operable into a 5000 ohm load or greater.

Specifications subject to change without notice.

DIMENSIONS

cm
in.

WIRING

REAR VIEW

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ORDERING INFORMATION

| S | R | C | M | – | | | | | | | – | | | | – | | | – | | | – | | |

Model	Range Code	Excitation/Output		Accuracy		Pressure Snubber*		Faceplate	
SRCM = SRCM	See Table 1 Below	A1	24 VAC/4-20 mA or 0-5 and 0-10 VDC	H	±0.5% FS	N	0	S	Setra Logo
		A2	24 VAC w/ BACnet®	F	±0.25% FS	1	1	B	Blank
						2	2		

Table 1. Range Specification

RANGE CODE	INCHES W.C.	RANGE CODE	PASCALS
R05WB	±0.05	Z02LB	±12.5
0R1WB	±0.10	025LB	±25
R25WB	±0.25	050LB	±50
0R5WB	±0.50	100LB	±100
001WB	±1.00	250LB	±250
2R5WB	±2.50	500LB	±500
005WB	±5.00	10CLB	±1000

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Ordering Example: Part No. SRCMR05WBA1HNS for A SRCM, ±0.05"WC Range, 24VAC/4-20 mA, 0.5% Full Scale Accuracy, NO Pressure Snubber

* For other pressure fitting configurations, please contact factory.

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

Pressure Snubber	
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.

SSP-SRCM Rev. D 12/18/13