Model SRCM
Room Pressure and Condition Monitor

NOTE: Accutrol 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 Accutrol's Model SRCM room pressure monitor, which utilizes highly accurate capacitance sensing technology to measure and display true low pressure differential.

"BACnet" is a registered trademark of ASHRAE"

FEATURES

■ **True Pressure Measurement**
• High accuracy Accutrol 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
• Labeled, removable termination strips—ease of wiring
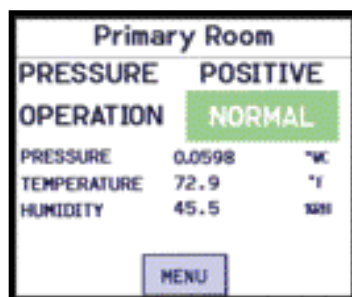
Accutrol's "2 in 1" Solution
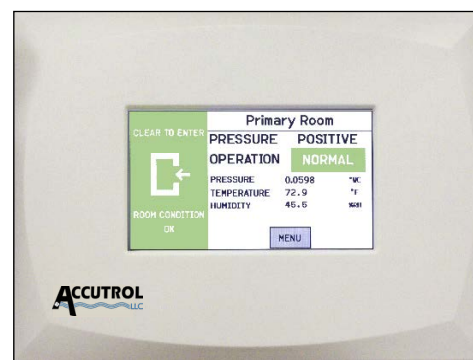### The Environment is Critical, the Control is Easy
Ambient Parameters

SRCM
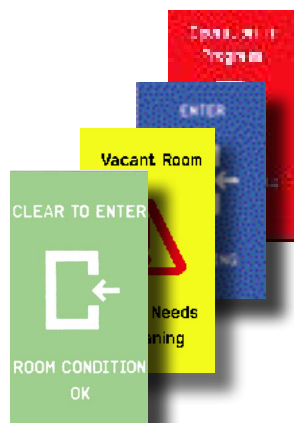
Attractive, Intuitive, and Configurable Design

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

Selectable Room Condition Banners

1/3 Screen Banners

Full Sceen Banners

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

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

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

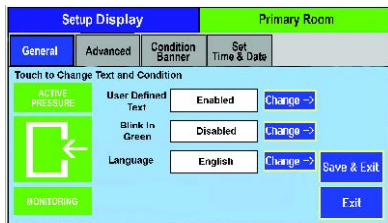Room Pressure Status
Visual Indication of Normal, Warning, and Alarm Condition

Displayed Pressure
Displays Room Pressure in User Selectable Units

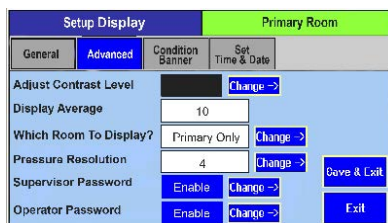Pressure Slide Bar On
Graphic Display of Pressure Reading
Relative to Alarm Setpoints

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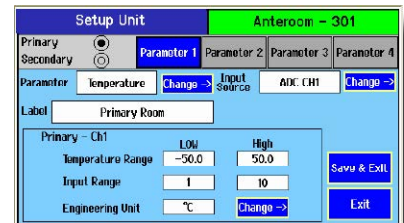
Setup Unit Operation
• Setup primary and secondary room
• Change analog output
• Free form data entry for room name

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ACCUTROL LLC

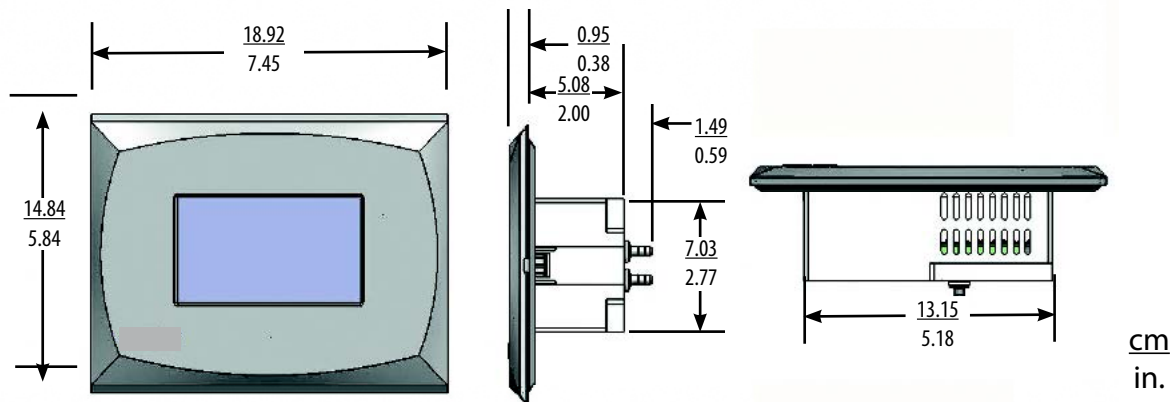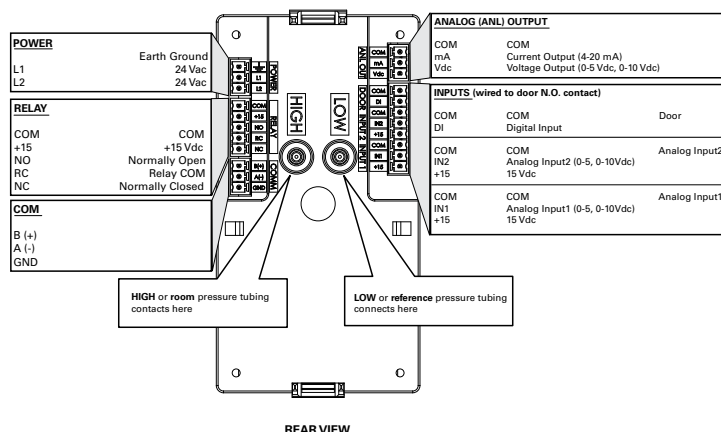## SPECIFICATIONS

Performance Data

	Code F	Code H
Accuracy RSS[1] (at constant temp)	±0.25% FS	±0.5%
Non-Linearity (BFSL based)	±0.24%	±0.49%
Hysteresis	±0.05%	±0.05%
Non-Repeatability	±0.05%	±0.05%
Zero/Span Tolerance	±0.05% FS	±0.05% FS

Pressure Media

Air or Non-Conductive, Non-Explosive Gases.

Certifications

CE	Electro-Magnetic Compatibility Directive 2004/108/EC Low-Voltage Directive 2006/95/EC RoHS Directive 2011/65/EC

[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.

Environmental Data

Operating[3] Temperature °F (°C)	32 to + 120 (0 to +50)
Storage Temperature °F (°C)	-20 to +160 (-30 to +70)
Operating Humidity	5 to 95% RH (non-condensing)

Physical Description

Case	Fire Retardant Plastic UL94 V-0
Dimensions	5.84"H x 7.45"W x 0.38"D (14.84 x 18.92 x 0.95 cm)
Electrical Connection	Removable Terminal Block
Pressure Fittings	Barbed Fittings for 1/4" O.D. Tubing
Weight (approx.)	1 lb. 3.2 ounces (554 grams)
Mounting	Mounts to a triple gang double-deep electrical box

Communications Option

BACnet®	MS/TP ASC
Display	
LCD	4.3" TFT, 480 x 272, Dimmable

Electrical Data (Voltage)

Circuit	3-Wire (Exc, Out, Com),
Output[4]	0 to 5 VDC, 0 to 10 VDC
Excitation	18-32 VAC, 50-60 HZ
Power Consumption	10 W max., 3 W typ.
Alarm Output	SPDT Relay: 0.6A @ 120 VAC, 2A @ 30 VDC

Electrical Data (Current)

Circuit	2-Wire
Output	4 to 20 mA
External Load	0 to 510 ohms
Excitation	18-32 VAC

Thermal Effects[2]

Compensated Range °F (°C)	±0.03% FSI (±0.05% FS)
Overpressure	±1 PSI (15"W.C. for ≤ 0.10"W.C. F.S.)

DIMENSIONS

cm
in.

WIRING

POWER
L1 — Earth Ground / 24 Vac
L2 — 24 Vac

RELAY
COM — COM
+15 — +15 Vdc
NO — Normally Open
RC — Relay COM
NC — Normally Closed

COM
B (+)
A (-)
GND

ANALOG (ANL) OUTPUT
COM — COM
mA — Current Output (4-20 mA)
Vdc — Voltage Output (0-5 Vdc, 0-10 Vdc)

INPUTS (wired to door N.O. contact)
COM — COM
DI — Digital Input — Door
COM — COM — Analog Input2
IN2 — Analog Input2 (0-5, 0-10Vdc)
+15 — 15 Vdc
COM — COM — Analog Input1
IN1 — Analog Input1 (0-5, 0-10Vdc)
+15 — 15 Vdc

HIGH LOW

HIGH or **room** pressure tubing contacts here

LOW or **reference** pressure tubing connects here

REAR VIEW

Model SRCM
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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	Accutrol 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

BACnet®
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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.