Dwyer

SERIES RSME | ROOM STATUS MONITOR

RSME with standard plastic bezel

RSME with stainless steel bezel option

BENEFITS/FEATURES

• **User configurable graphical interface**
• **Can monitor up to 3 rooms with a single unit**
• **Displays up to 4 parameters including pressure, relative humidity, temperature, air change per hour (ACH), and/or door status**
• **Shallow mounting depth of 1.1˝ (27.5 mm) allows for flush mount installation in areas with space constraints**
• **Full color 4.3˝ touchscreen LCD incorporates color status indication: green for good, yellow for warning, and red for alarm**
• **Easy-to-clean optional brushed stainless steel bezel**
• **BACnet MS/TP and Modbus® RTU communication is standard**
• **Includes RSME, junction box, and USB-C/USB-A flash-drive**

APPLICATIONS

• Hospital isolation rooms
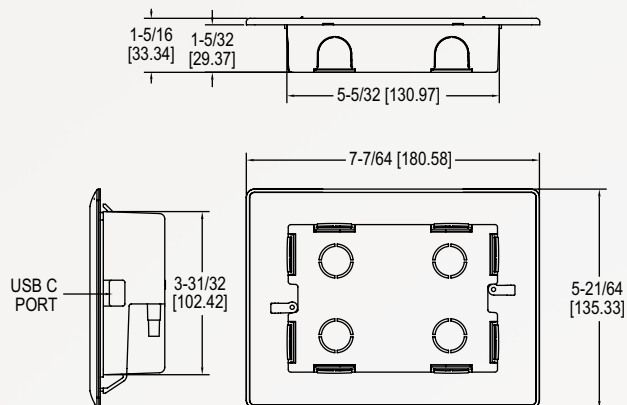• Pharmaceutical facilities
• Dental offices
• School nurse offices

DESCRIPTION

The **Series RSME Room Status Monitor** is designed for low differential pressure applications that require stringent pressure monitoring and alarming. It can be configured to monitor positive or negative pressure in clean rooms, hospital isolation rooms, laboratories, and vivariums. The RSME is a complete system with a touchscreen graphical user interface which enables access to pressure, humidity, temperature, air change, security, door status, calibration, and alarm setup. The graphical display color changes allows a clear determination of when the parameters are operating within the acceptable range (green), caution range (yellow), or have gone outside the acceptable operating range (red). The RSME room status monitor comes standard with BACnet MS/TP and Modbus® RTU communications.
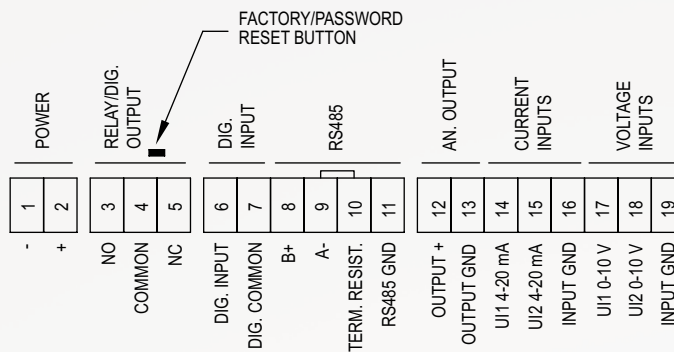
SPECIFICATIONS

Service	Air.
Measurement Technology	Piezoresistive pressure sensor.
Wetted Materials	Front: PMMA window with IP65 rating. Back housing: ABS UL 94 V-0.
Pressure Limits	1.5 psig.
Accuracy	±0.5% RSS (includes non-linearity: ±0.49% BFSL, hysteresis: ±0.05% and non-repeatability: ±0.05%), or ±1% RSS (includes non-linearity: ±0.99% BFSL, hysteresis: ±0.05% and non-repeatability: ±0.05%), after 1 hour warm-up period.
Thermal Effect	±0.02% FS/°F (includes zero and span).
Process Connection	Barbed, fits 1/8˝ and 3/16˝ (3 mm and 5 mm) ID rubber or vinyl tubing.
Inputs	Two (2) user-selectable 4-20 mA, 0-5 VDC, or 0-10 VDC; USB type C used for cloning programming; One (1) digital input for door status.
Outputs	One (1) digital output (DO) rated 5 A @ 30 VDC; One (1) 4-20 mA or 0-10 V (user selectable) corresponding to internal pressure or retransmission of any input.
Ambient Temperature Limits	32 to 122°F (0 to 50°C).
Power Requirements	24 VAC/VDC.
Selectable Pressure Units	Pa, kPa, cm w.c., mm w.c., and in w.c.
Temperature Units	°F and °C.
Zero and Span Adjustments	Adjustable via touchscreen.
Electrical Connection	Removable terminal block.
Display	4.3˝ (10.9 cm) color TFT LCD, dimmable; 480 x 272 resolution.
Communications	Modbus® RTU, BACnet MS/TP.
Audible Alarm	69.1 dB 10 cm from display.
Weight	13.6 oz (385.6 g).
Compliance	BTL, CE.

DIMENSIONS

USB C PORT

1-5/16 [33.34] 1-5/32 [29.37]
5-5/32 [130.97]
7-7/64 [180.58]
3-31/32 [102.42]
5-21/64 [135.33]

WIRING DIAGRAM

FACTORY/PASSWORD RESET BUTTON

POWER		RELAY/DIG. OUTPUT			DIG. INPUT		RS485				AN. OUTPUT		CURRENT INPUTS			VOLTAGE INPUTS		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
-	+	NO	COMMON	NC	DIG. INPUT	DIG. COMMON	B+	A-	TERM. RESIST.	RS485 GND	OUTPUT +	OUTPUT GND	UI1 4-20 mA	UI2 4-20 mA	INPUT GND	UI1 0-10 V	UI2 0-10 V	INPUT GND

HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

RSME   **-B**   **-003**   **-SS**   **-NIST**

SERIES
RSME: Room status monitor

ACCURACY
-B: ±0.5%
-C: ±1.0%

OPTIONS
-**NIST:** NIST traceable calibration certificate

BEZEL
BLANK: Plastic bezel
-**SS:** Brushed stainless steel bezel

PRESSURE RANGE
-**003:** 0 to 0.5 in w.c.
-**004:** 0 to 1.0 in w.c.
-**005:** 0 to 2.0 in w.c.
-**014:** -0.5 to 0.5 in w.c.
-**015:** -1.0 to 1.0 in w.c.
-**016:** -2.0 to 2.0 in w.c.
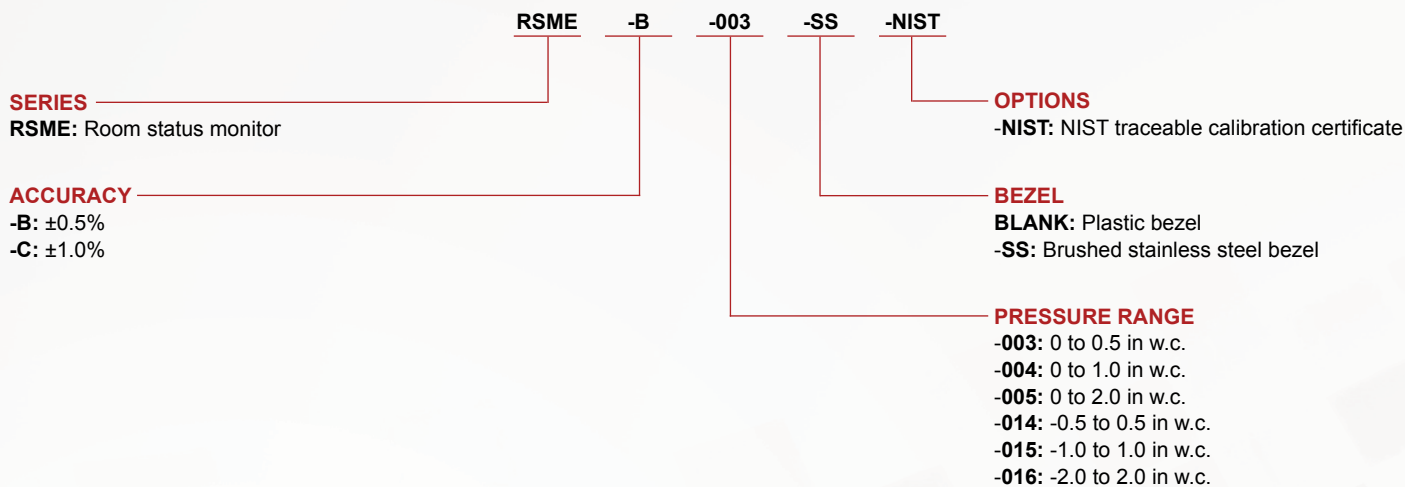
Modbus® is a registered trademark of Schneider Automation, Inc.