

CRC-RPM/C1

Room Pressure Monitor / Controller

Rev 5.2

FEATURES:

- Full color energy efficient ultra-thin LCD touch screen interface (LED Backlight)
- Direct pressure measurement with dead ended silicon diaphragm
- Capable of monitoring and controlling one (1) pressure relationships
- Supports positive, negative and neutral environments
- Indicates appropriate precautions to be taken when entering room
- Display resolution to 0.0001" WC
- Supports multiple pressure ranges
- Audible and visual alarms
- Four fully configurable modes
- Full automation of room changeover
- Automated clearing / purging
- Monitors, alarms and allows local set point control of up to eight (8) additional parameters
- Password protected access
- Visual I/O diagnostics of points
- Water spray and dust resistant ultra-thin surface mount enclosure
- Resistive touch control – Use bare finger, gloved finger, or stylus for interaction
- All parameters / settings saved in non-volatile memory
- Field configurable, easy, and intuitive menus
- Ability to “Zero” calibrate the pressure transducer with a touch of a finger
- Supports multiple BMS protocols



OVERVIEW:

CRC's Room Pressure Monitor / Controller model CRC-RPC1 accurately monitors and/or controls one differential pressure relationship where proper pressurization is vital. The CRC-RPC1 can meet the stringent critical environment of; isolation rooms, operating rooms, pharmacies, research facilities and animal rooms. The CRC-RPC1 utilizes direct pressure measurement with industrial quality differential pressure transducer technology capable of displaying pressure to 0.0001"WC.

The primary screen of the RPM/C1 clearly displays current isolation mode along with differential pressure and optional precautionary information. A secondary screen allows the display, alarm, and set point adjustment of 8 additional points. Room changeover automation and automated clearing / purging functions allow facilities to optimize room utilization while insuring the safety of patients, staff and visitors.

Each Monitor / controller incorporates an easy to navigate microprocessor based controller with full color touch screen interface. All settings / configuring is made by an easy to navigate touch screen interface or via network. The CRC-RPC1 can be configured as a pressure monitor only or complete system controller. The CRC-RPC1's analog inputs/outputs and/or communications allow the CRC-RPC1 seamlessly integrate with the CRC-CLV air valve, Critical Room Control system, or building automation systems.

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DISPLAY:

Description:	Full color LED TFT 16 bit (65,535) color depth, sunlight viewable, 320cdm brightness, touch screen interface - resistive touch (will work with gloved finger), screen is capable of wipe down cleaning and water spray and dust resistant meeting (IP-54)
Listing:	CSA©, RU(us), UL 60950, UL 94 V-0 (Enclosure)
Screens:	Five (5) user defined modes, field configurable verbiage, configurable screen color, patented clearing timing features
Main Screen:	Background color field configurable for green (default), red or blue
Modes:	Total of five (5) user configurable modes including fully automated room changeover
More Info:	Supports up to eight user defined network values allowing local display of points descriptor, value, set point change, visual and audible alarming
I/O Diagnostic:	Graphical display of controller analog inputs/outputs and digital inputs/outputs
Mounting:	Low profile surface

POWER REQUIREMENTS:

Input Power:	22 to 26VAC; 50/60Hz, fully isolated
Power Draw:	18 VA
Primary:	24VAC Input

ENVIRONMENTAL CHARACTERISTICS:

Temperature Limits:

Storage:	-40 to 180
Operating:	+0 to 160
Compensated Range:	+35 to 130

Temperature Coefficients:

Zero:	±0.03%F.S./ F
Span:	±0.03%F.S./ F
Listing:	UL-94-5VA
EMC:	CE compliant to EN61326: 1997+A1: 1998+A2: 2001 annex A (heavy industrial)

PERFORMANCE CHARACTERISTICS:

Accuracy Class (F.S.):	±0.4% & ±0.8% (includes the effects of non-linearity, hysteresis, and non-repeatability)
Stability-Max. Change:	≤0.25% (Full scale/year)
Unidirectional Range:	0/0.1, 0/0.25, 0/0.5, 0/0.75, 0/1.0, 0/2.0, 0/2.5, 0/3.0, 0/5.0, 0/10.0, 0/25.0
Compound Range:	±0.1, ±0.25, ±0.5, ±1.0, ±2.0, ±5.0, ±10.0
Response Time:	250msec
Over Pressure limits:	
Proof Pressure:	15psi
Burst Pressure:	25psi
Max. Static Line Press:	25psi

PRESSURE ALARMS:

Audible: 2 (pressure alarm & remote alarm)
Visual: 2 (amber (loss of pressure), red (alarm))

CONTROLLER I/O:

Analog Inputs: 4 total analog inputs

- AIN1 & AIN2 are selectable (4-20mA, 0-10V, or 0-5V)
- AIN3 & AIN4 are (0-10V)

Analog Outputs: 4 (2-10V)

Digital Inputs: 4

Relays: 4 (normally closed - 0.5 A at 125 VAC; 2 A at 30 VDC)

Terminals: Removable screw terminals (18ga - 26ga wire)

Enclosure: Fire retardant, extruded acrylic/PVC Alloy UL94V

Communication: RS-485

Onboard power: 10vdc (80mA max.), 5vdc (80mA max.), and onboard loop power circuit 22VDC (80mA max.)

COMMUNICATION:

Connection: RS-485

Supported Protocol: BACnet MS/TP: Modbus, Johnson Controls Incorporated N2 & LON with optional card

Network Debug: Network communication diagnostics

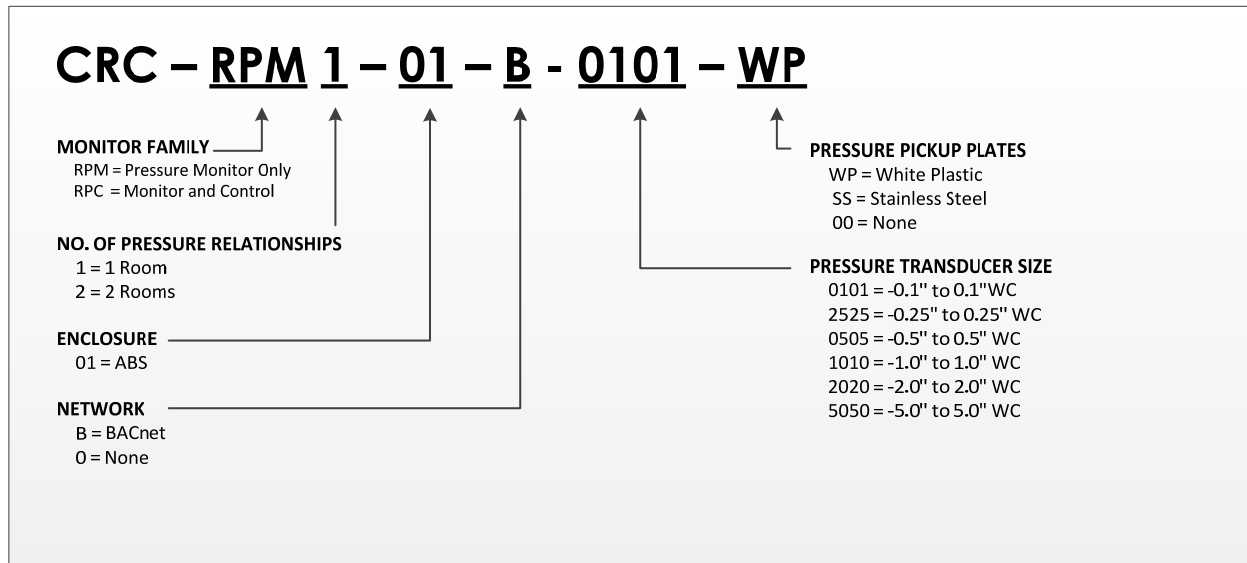
Network Setup: Baud rate, MAC address and instance ID configured via touch screen

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ORDERING NOMENCLATURE:



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ADDITIONAL SCREENS (SOME SHOWN AS RPM2):

PATIENT ROOM

- TEMPERATURE: 72.6° SP 68.7
- HUMIDITY: 7.2% SP 4.5%
- AIR CHANGE: 5 ACH
- HEPA DP: 0.0023"WC

ANTE ROOM

- TEMPERATURE: 71.2° SP 69.2
- HUMIDITY: 6.2% SP 4.5%
- SUPPLY : 4.5 CFM
- HEPA DP: 0.0023"WC

EXIT

PATIENT ROOM

TEMPERATURE Set Point

69.0

APPLY CANCEL

ANTE ROOM

- SUPPLY : 4.5 CFM
- HEPA DP: 0.0023"WC

EXIT

PATIENT ROOM 0.0000" WC ANTE ROOM

* LOSS OF PRESSURE - CHECK DOOR *

MODE: POSITIVE PRESSURE
STANDARD PRECAUTIONS

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM 0.0000" WC ANTE ROOM

* PRESSURE ALARM - CHECK DOOR *

MODE: POSITIVE PRESSURE
STANDARD PRECAUTIONS

PRESSURE ALARM

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: TO BE CLEANED
STANDARD PRECAUTIONS

CLEANED

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: OCCUPIED - NO ISO
STANDARD PRECAUTIONS

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: CLEARING
STANDARD PRECAUTIONS

TIME UNTILL CLEARED: 21:54

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: VACANT

AUTHORIZED PERSONNEL ONLY

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ADDITIONAL PRODUCT INFORMATION:

Please contact us at:

Web: www.criticalroom.com

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