



ROOM PRESSURE MONITOR RPC Series

The RPC Series room pressure monitor/transmitter is used to measure differential pressure in the range of 0.125 to 1" WC or 30 to 250 Pa and provide either an analog or BACnet compatible signal to a building automation system.

It combines precision high sensitivity silicon sensing capabilities and the latest ASIC technology to substantially reduce offset errors due to changes in temperature, stability to warm up, long term instability and position sensitivity.

It features an LCD to display the pressure value, several bi-directional pressure ranges and field-selectable output signal types for the most flexible application. The device has an on-board auto-zero function. It features an alarm output with a adjustable trip points for high and low alarm levels, an on-board buzzer, a remote buzzer output with silence switch and a flashing alarm LED.



SPECIFICATION:

Pressure Ranges	$\pm 1", \pm 0.5", \pm 0.25", \pm 0.125" \text{ WC}$ $\pm 250, \pm 125, \pm 60, \pm 30 \text{ Pa}$
Accuracy	$\pm 1\% \text{ F.S.O.}$ ($\pm 2\% \text{ F.S.O.}$ for 0.125"WC and 30 Pa ranges)
Stability	$\pm 1\% \text{ FS max}$ (1 year)
Thermal Effects	$< \pm 3.5\% \text{ FS max}$, 5 - 50°C (41 - 122°F)
Response Time	0 - 60 Sec (menu selectable)
Proof Pressure	100" WC (24.9 kPa)
Burst Pressure	200" WC (49.8 kPa)
Operating Conditions	0 - 60°C (32 - 140°F), 10 - 90% RH non-condensing
Storage Temperature	-40 - 70°C (-40 - 158°F)
Media Compatibility	Dry air and inert gas
Zero Adjustment	Pushbutton auto-zero
Power Supply	24 Vac/dc, $\pm 10\%$
Power Consumption	70 mA max with alarms on (80 mA with BACnet option)
Output Signal	4-20 mA (3-wire), 0-5 Vdc or 0-10 Vdc (3-wire), field selectable
Output Drive	750 Ω max (4-20 mA), 2K Ω min (voltage)
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
Wiring Connections	Screw terminal block 14 to 22 AWG)
Pressure Connections	Ports for 1/16" ID tubing (1/8" ID Adapters included)
Enclosure	Wall mount, White ABS, IP30 (NEMA1)
Dimensions	84 W x 119 H x 29 D mm (3.3" x 4.7" x 1.15")
Weight	115 grams (4 oz)
LCD DISPLAY	
Display Size	38.1 x 16.5 mm (1.5" x 0.65")
Digit Height	11.43 mm (0.45")
Symbols	" WC, Pa
Backlight	Enable/disable via menu

PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
RPC	Room Pressure Monitor\Transmitter

CODE	Pressure Ranges
1	$\pm 1" \text{ WC}, \pm 0.5" \text{ WC}, \pm 250 \text{ Pa}, \pm 125 \text{ Pa}$
2	$\pm 0.25" \text{ WC}, \pm 0.125" \text{ WC}, \pm 60 \text{ Pa}, \pm 30 \text{ Pa}$

CODE	Communications
-	None (Leave Blank)
BAC	BACnet Communications

CODE	Options
AC	Continental pick-up port
SP	Stainless plate pick-up port
OP	Outside pick-up port

Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

ALARM FUNCTIONS

Alarm Relay Output.....	N.O. contact, 2 Amps @ 120 Vac or 30 Vdc
Alarm Relay Trip Point.....	Upper and lower trip levels adjustable over the pressure range
Alarm Relay Delay.....	0 to 10 Minutes (menu selectable)
Alarm Visual Indication.....	Red flashing LED
Alarm Audible Indication.....	On-board buzzer, 85 db on high range (menu selectable)
Remote Buzzer Output.....	Output to control remote audible alarm (Part Number AA-1)

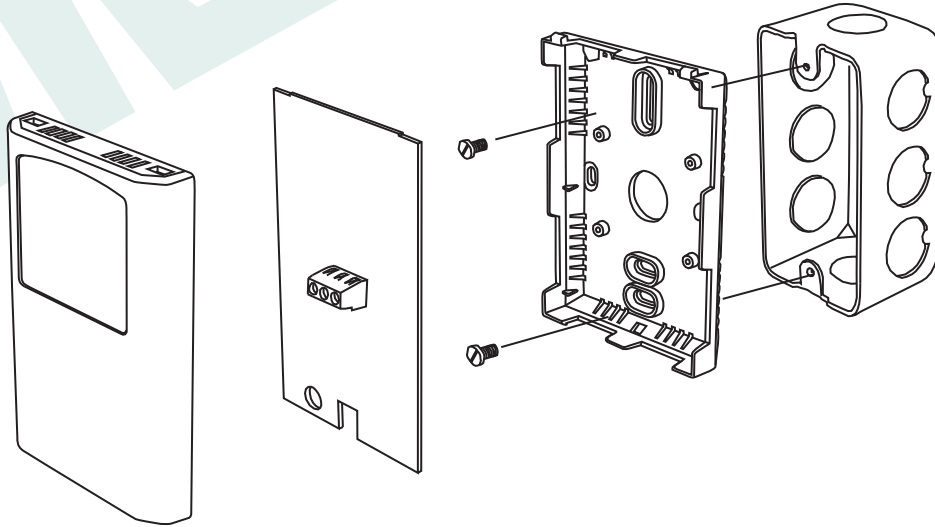
OPTIONAL BACnet COMMUNICATIONS

Communications.....	2-wire RS-485, BACnet MS/TP protocol
Baud Rate.....	Locally set to 9600, 19200, 38400 or 76800
MAC Address Range.....	Locally set to 0-127 (factory default is 3)

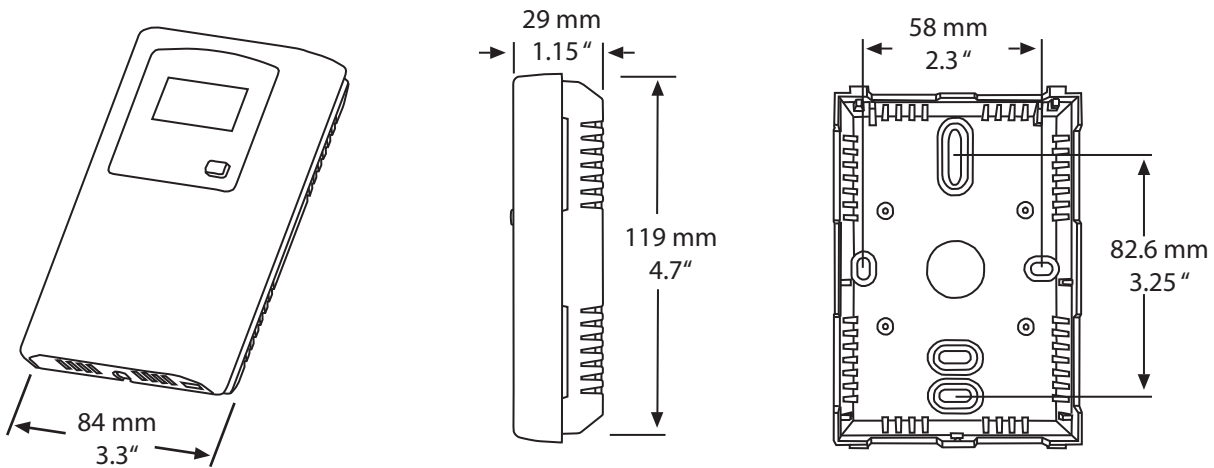
TYPICAL INSTALLATION:

For complete installation and wiring details, please refer to the product installation instructions.

Install the enclosure directly on a standard electrical box about four to five feet from the floor of the area to be controlled. Remove the enclosure cover by unsnapping the bottom edge loose and then unhook the cover from the base at the top edge. Remove the circuit board and place aside. Route any wires through the back of the enclosure base. The enclosure has a multifunction base that has provisions for mounting on many standard electrical boxes. Screw the base to the electrical box. (Screws not included) Feed wiring through the wiring hole in the circuit board and snap into base. Re-install cover. After installation the cover should be locked on by using the Phillips screw located at the bottom of the enclosure. The remote pressure pickup (mounted on an electrical wall plate) is typically mounted on the opposite side of the wall outside the room being monitored. It also mounts directly to a standard electrical box about four to five feet from the floor. If the remote buzzer option is used, simply mount it directly to a standard electrical box.



DIMENSIONS:



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RoHS
COMPLIANT



Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transmitters for Building Automation Management Systems. We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM