



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.....	± 1", ± 0.5", ± 0.25", ± 0.125" WC ± 250, ± 125, ± 60, ± 30 Pa
Accuracy.....	± 1% F.S.O. (±2% F.S.O. for 0.125"WC and 30 Pa ranges)
Stability.....	± 1% FS max (1 year)
Thermal Effects.....	< ± 3.5% 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 - 50°C (32 - 122°F), 5 - 95% RH non-condensing
Storage Temperature.....	-30 - 30°C (-22 - 140°F)
Media Compatibility.....	Dry air and inert gas
Zero Adjustment.....	Pushbutton auto-zero
Power Supply.....	24 Vac/dc, ±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), 2KΩ 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	±1"WC, ±0.5"WC, ±250 Pa, ±125 Pa
2	±0.25"WC, ±0.125"WC, ±60 Pa, ±30 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)

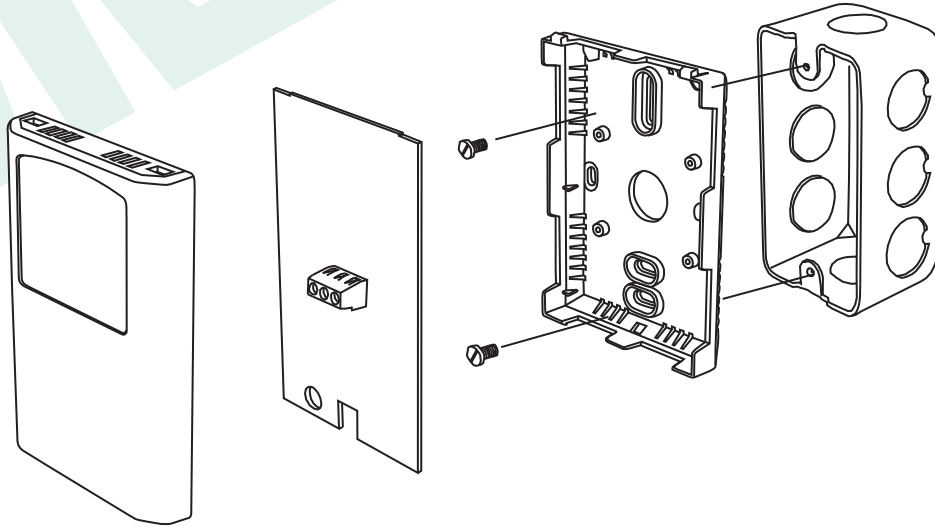
OPTIONAL BACnet COMMUNICATIONS

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)

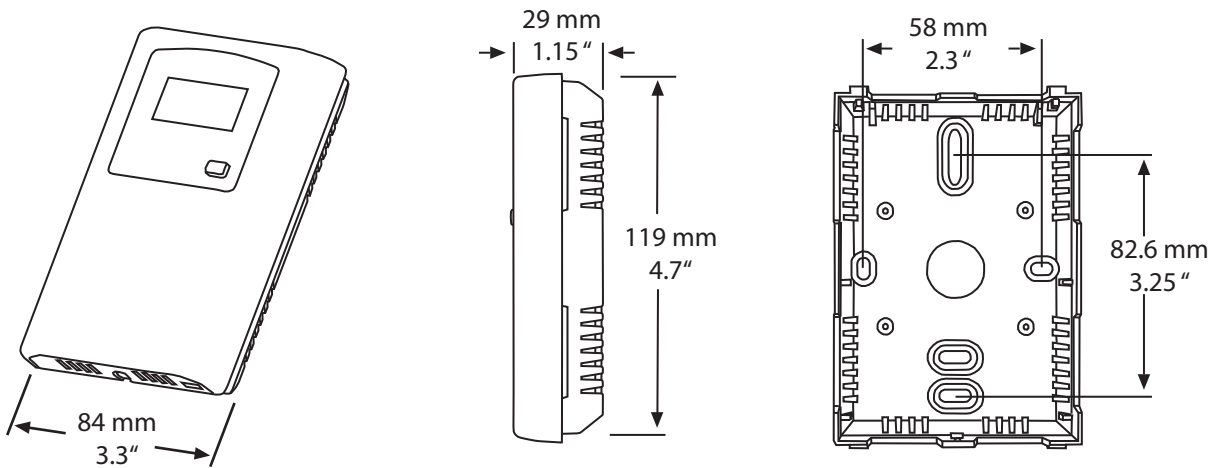
TYPICAL INSTALLATION:

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