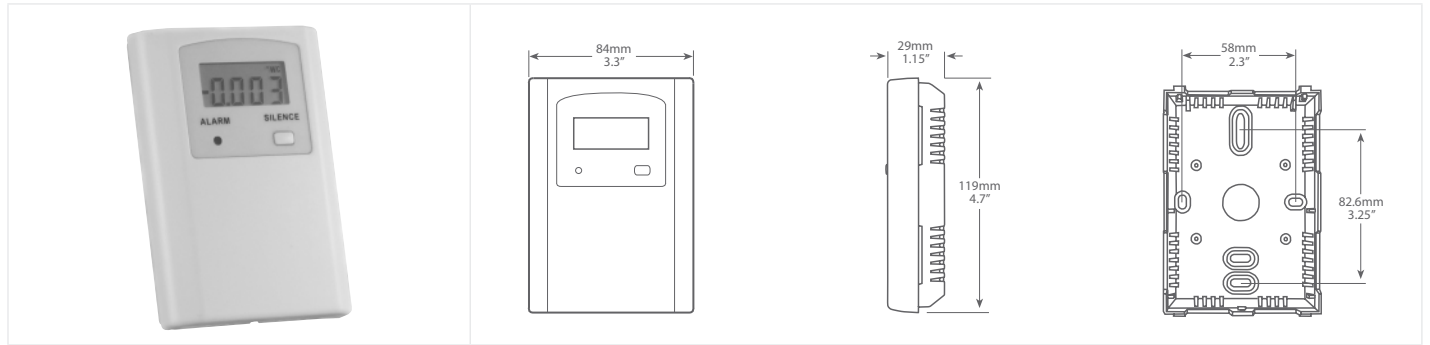




## ROOM PRESSURE MONITOR



### RPC SERIES

### PRODUCT DESCRIPTION

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.

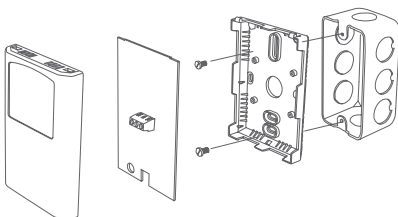
It features an LCD to display the pressure value, several bi-directional pressure ranges and field-selectable output signal types for the most flexible application. The device has an on-board auto-zero function. It features an alarm output with an adjustable trip point for high and low alarm levels,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

### TYPICAL INSTALLATION

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

The RPC series can be mounted directly to a single gang electrical box or directly to a wall. If the remote buzzer option is used, simply mount it directly a standard electrical box.

A terminal block connection is provided for connection to the Building Automation System. There are several wiring configurations depending on the options selected.

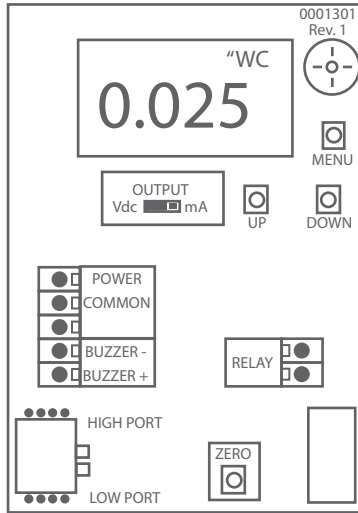


### SPECIFICATIONS

<b>PRESSURE RANGES</b>	±1", ±0.5", ±0.25", ±0.125" WC ±250, ±125, ±60, ±30 Pa
<b>ACCURACY</b>	±1% F.S.O. (±2% F.S.O. for 0.125"WC and 30 Pa ranges)
<b>STABILITY</b>	±1% FS max (1 year)
<b>THERMAL EFFECTS</b>	<±3.5% FS max, 5 to 50°C (41 to 122°F)
<b>RESPONSE TIME</b>	0 to 60 seconds (menu selectable)
<b>PROOF PRESSURE</b>	100"WC (24.9 kPa)
<b>BURST PRESSURE</b>	200"WC (49.8 kPa)
<b>OPERATING CONDITIONS</b>	0 to 60°C (32 to 140°F), 10 to 90%RH non-condensing
<b>STORAGE TEMPERATURE</b>	-40 to 70°C (-40 to 158°F)
<b>MEDIA COMPATIBILITY</b>	Dry air and inert gas
<b>ZERO ADJUSTMENT</b>	Pushbutton auto-zero
<b>POWER SUPPLY</b>	24 Vac/dc, ±10%
<b>POWER CONSUMPTION</b>	70 mA max with alarms on (80 mA with BACnet® option)
<b>OUTPUT SIGNAL</b>	4-20 mA (3 wire), 0-5 Vdc or 0-10 Vdc (3 wire), field selectable
<b>OUTPUT DRIVE</b>	<b>Current:</b> 750Ω max <b>Voltage:</b> 2000Ω min
<b>INPUT VOLTAGE EFFECT</b>	Negligible over specified operating range
<b>PROTECTION CIRCUITRY</b>	Reverse voltage protected and output limited
<b>WIRING CONNECTIONS</b>	Screw terminal block (14 to 22 AWG)
<b>PRESSURE CONNECTIONS</b>	Ports for 1/16" ID tubing (1/8" ID Adapters included)
<b>ENCLOSURE</b>	White ABS, IP30 (NEMA 1)
<b>DIMENSIONS</b>	84mm W x 119mm H x 29mm D (3.3" x 4.7" x 1.15")
<b>WEIGHT</b>	115g (4 oz)
<b>COUNTRY OF ORIGIN</b>	Canada
<b>LCD DISPLAY</b>	<b>Size:</b> 38.1mm W x 16.5mm H (1.5" x 0.65") <b>Digit Height:</b> 11.43mm (0.45") <b>Symbols:</b> "WC, Pa <b>Backlight:</b> Enable/disable via menu
<b>ALARM FUNCTION</b>	<b>Relay Output:</b> N.O. contact, 2 Amps @ 120 Vac or 30 Vdc <b>Relay Trip Point:</b> Upper and lower trip levels adjustable over the pressure range <b>Relay Delay:</b> 0 to 10 minutes (menu selectable) <b>Visual Indication:</b> Setpoint step size is 0.5°C or 1.0°F <b>Audible Indication:</b> On-board buzzer, 85 db on high range (menu selectable) <b>Buzzer Output:</b> Output to control remote audible alarm (Part Number AA-1)
<b>OPTIONAL BACnet® COMMUNICATIONS</b>	<b>Communications:</b> 2 wires RS-485, BACnet® MS/TP protocol <b>Baud Rate:</b> Locally set to 9600, 19200, 38400, or 76800 <b>MAC Address Range:</b> Locally set to 0-127 (factory default is 3)

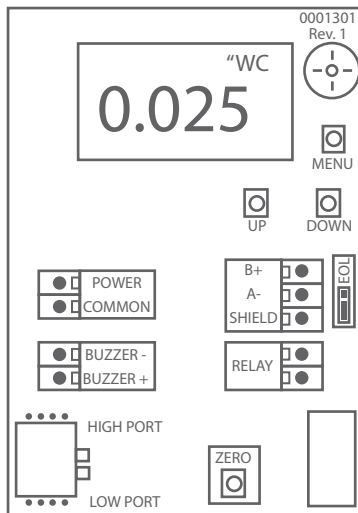


## WIRING INFORMATION



### ANALOG MODEL

TERMINAL	FUNCTION
PWR	24 Vac/Vdc
COM	Common
OUT	Analog Output
RELAY	Digital Output
RELAY	Digital Output



### BACnet® MODEL

TERMINAL	FUNCTION
PWR	24 Vac/Vdc
COM	Common
B +	B +
A -	A -
SHIELD	Shield
RELAY	Digital Output
RELAY	Digital Output

## ORDERING

PRODUCT	RPC	Room Pressure Monitor/Transmitter
PRESSURE RANGES	1	±1"WC, ±0.5"WC, ±250 Pa, ±125 Pa
	2	±0.25"WC, ±0.125"WC, ±60 Pa, ±30 Pa
COMMUNICATIONS	-	None (Leave Blank)
	BAC	BACnet® Communications
OPTIONS	AC	Continental pick-up port
	SP	Stainless plate pick-up port
	OP	Outside pick-up port

## PART NUMBER

RPC

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



Greystone Energy Systems, Inc.  
150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7

Ph: +1 (506) 853-3057 Fax: +1 (506) 853-6014  
North America: 1-800-561-5611  
E-mail: mail@greystoneenergy.com