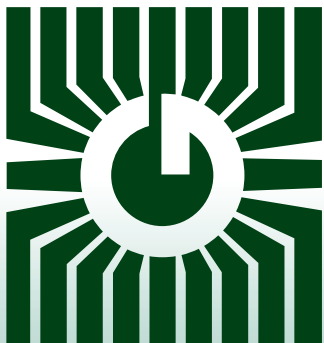


# GREYSTONE

ACCURACY BY DESIGN



## ROOM PRESSURE MONITOR RP Series



### Precision room pressure control/sensing

#### FEATURES:

- LCD indication
- Jumper selectable outputs
- Precision silicon sensor
- Functional and attractive enclosure
- Installer friendly wiring access
- Several ranges available

*Peace of mind  
through reliable  
pressure monitoring*

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

## DESCRIPTION:

The RP series Room Pressure Monitor is used to measure differential pressure in the range of 0.125 to 1" wc or 30 to 250 Pa.

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 as well as a connection for remote zeroing. It also features an optional alarm output with a variable trip point, a remote buzzer output with silence switch and a flashing alarm LED.

## SPECIFICATIONS:

Pressure Ranges .....	$\pm 1'' \text{ wc}$ , $\pm 0.5'' \text{ wc}$ , $\pm 0.25'' \text{ wc}$ , $\pm 0.125'' \text{ wc}$ $\pm 250 \text{ Pa}$ , $\pm 125 \text{ Pa}$ , $\pm 60 \text{ Pa}$ , $\pm 30 \text{ Pa}$
Accuracy .....	$\pm 1\% \text{ F.S.O.}$ ( $\pm 2\% \text{ F.S.O.}$ for 0.125"wc and 30 Pa ranges)
Measurement Type .....	Differential (two port)
Response Time .....	0.5 Sec
Thermal Effects .....	$< \pm 3.5\%$ over compensated range
Compensated Range .....	0 - 70°C (32 - 158°F)
Over Pressure .....	100" wc (24.9 kPa)
Operating Conditions .....	0 - 70 C (32 - 158 F), 10 - 90% RH non-condensing
Power Supply (at transmitter) ....	15 - 27 Vac, 20 - 35 Vdc (non-isolated half-wave rectified)
Supply Current .....	$< 30\text{mA}$ (base model), 50mA (with alarm options), 70mA (with buzzer connected)
Input Voltage Effect .....	Negligible over specified operating range
Protection Circuitry .....	Reverse voltage protected and output limited
Output Signal .....	4-20 mA (3-wire), 0-5 Vdc or 0-10 Vdc (3-wire), Pin jumper selectable
Current Output Drive Capability..	550 ohms maximum
Voltage Output Drive Capability..	2 Kohms minimum
Zero Adjustment .....	Pushbutton auto-zero (on device or remote)
Wiring Connections .....	Screw terminal block (14 to 22 AWG)
Pressure Connections .....	1/8" ID Flexible tubing
Display .....	3 1/2 digit LCD, 0.4" digit height
Relay Output .....	N.O. contact, 2.5 Amps @ 120 Vac, 2.5 Amps @ 30 Vdc
Relay Trip Point .....	Adjustable from ZERO to SPAN via trimpot
Relay Delay .....	5 seconds on / 5 seconds off
Enclosure .....	Executive Space, 71 W x 119 H x 32mm D (2.8" x 4.7" x 1.25")
Weight .....	110 grams (3.9 oz)

# ROOM PRESSURE MONITOR PRODUCT ORDERING INFORMATION:

MODEL	Product Description
RP	Room pressure monitor/transmitter with remote zero

CODE	Range
01	± 1" WC
02	± 0.5" WC
03	± 0.25" WC
04	± 0.125" WC
05	± 250 Pa
06	± 125 Pa
07	± 60 Pa
08	± 30 Pa

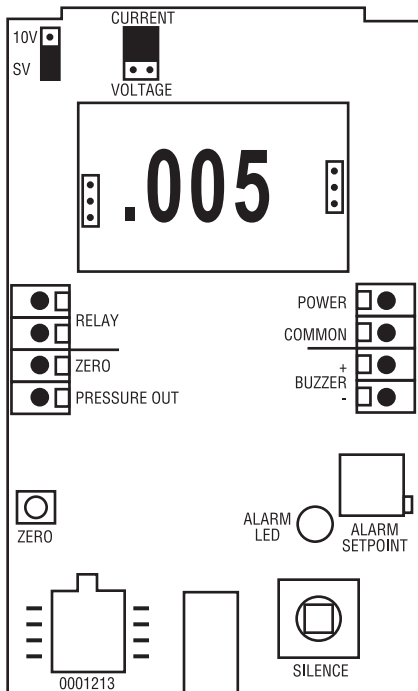
CODE	Options
LC	LCD display-Displays the differential pressure value and the alarm setpoint value on demand
A	Alarm functions-LED, Silence switch, Buzzer out, Relay out and Setpoint control
SP	Stainless plate pick-up port
AE	Executive (AE) pick-up port

RP 04 LCASP

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

**EXAMPLE:**  
Room pressure sensor, ±0.125" range, c/w LCD, alarm functions and stainless plate pick-up port.  
**RP04LCASP**

## PCB/WIRING INFORMATION



Terminal	Function
POWER	From +24 Vac/dc of controller or power supply
COMMON	To GND or COMMON of controller
PRESSURE OUT	To analog input of controller 4-20 mA or 0-5 Vdc or 0-10 Vdc
ZERO	To digital output of controller for remote zeroing
RELAY (2)	To digital input of controller or external annunciator
BUZZER +	To plus of remote buzzer
BUZZER -	To minus of remote buzzer

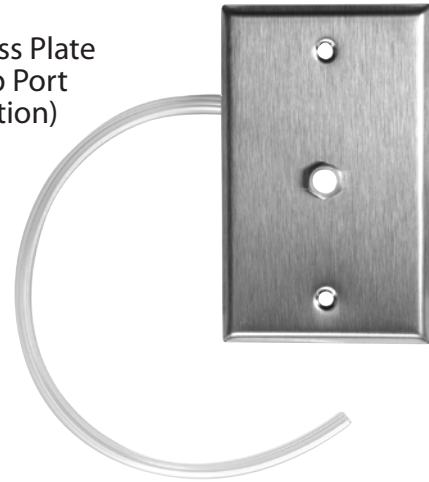
\* Some models do not have all these features

## OPTIONS

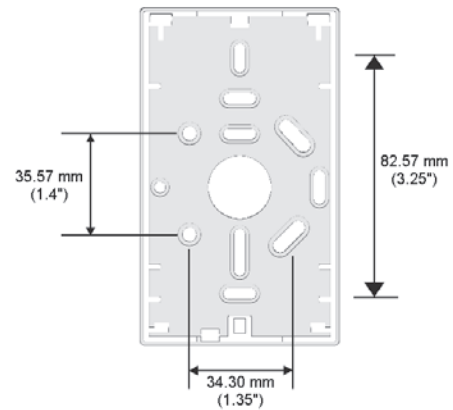
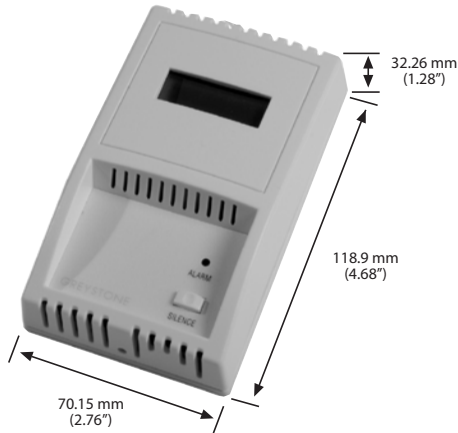
Audible Alarm  
Part # AA-1  
(to be ordered  
separately)



Stainless Plate  
Pick-up Port  
(SP Option)



## DIMENSIONS



**Other GREYSTONE  
Accuracy by Design  
Products for the  
HVAC Professional**

- Temperature Sensors and Transducers
- Humidity Transducers
- Pressure Transducers
- Current Switches and Sensors
- Electronic to Pneumatic (IP)
- Transducers
- Power Supplies



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ACCURACY BY DESIGN

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**RoHS**  
COMPLIANT



*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transducers 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.*

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