



# GREYSTONE

ENERGY SYSTEMS INC

## ULTRA LOW PRESSURE TRANSMITTER ULP Series

The ULP series is used to measure differential pressure between an area and a reference space. It combines precision high sensitivity silicon sensing capabilities and the latest in ASIC technology with Dynamic Self Compensation. Standard features include: Bi-directional pressure ranges, selectable output, and on-board auto-zeroing. A built-in alarm relay output and LCD are optional. Several accessories are available.

### SPECIFICATION:

Pressure Ranges.....(1)  $\pm 1$ ", 0-1",  $\pm 0.5$ ", 0-0.5" WC,  
 $\pm 250$ , 0-250,  $\pm 125$ , 0-125 Pa  
(2)  $\pm 0.25$ ", 0-0.25",  $\pm 0.125$ ", 0-0.125" WC  
 $\pm 60$ , 0-60,  $\pm 30$ , 0-30 Pa

Accuracy..... $\pm 1\%$  FS of selected range  
Stability..... $\pm 1\%$  FS (1 year)  
Thermal Effect..... $\pm 2\%$  FS max ,  
10 - 40°C (50 - 104°F)

Response Time.....5 or 30 Seconds,  
(switch selectable)

Proof Pressure.....100 "WC (24.9 kPa) for ULP1,  
40 "WC (9.96 kPa) for ULP1

Burst Pressure.....200 "WC (49.8 kPa) for ULP1,  
80 "WC (19.9 kPa) for ULP2

Operating Conditions.....0 - 60°C (32 - 140°F),  
0 - 90 %RH non-condensing

Storage Temperature.....-40 - 95°C (-40 - 203°F)

Media Compatibility.....Dry air or inert gas

Zero Adjust.....Pushbutton or digital input  
auto-zero

Power Supply.....24 Vac/dc  $\pm 10\%$

Power Consumption.....55 mA max. with relay option

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 or 0-10 Vdc  
(3-wire), field selectable

Output Drive.....750  $\Omega$  max (4-20 mA),  
2 K $\Omega$  min (voltage)

Wiring Connections.....Screw terminal block  
(14 to 22 AWG)

Pressure Connections.....Barbed ports for 1/8" to 3/16" ID  
tubing

Conduit Connection.....Access hole for 1/2" NPT conduit  
or cable gland

Enclosure.....Grey ABS with gasket, UL94-5VB  
IP65 (NEMA 4X)  
145 W x 101 H x 63 D mm  
(5.7" x 4.0" x 2.5")

Weight.....260 g (9.2 oz)



### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
ULP	Ultra Low Pressure Transmitter

CODE	Options
A	Standard
B	LCD Display

CODE	Pressure Ranges
1	$\pm 1$ , 0-1, $\pm 0.5$ , 0-0.5"WC / $\pm 250$ , 0-250, $\pm 125$ , 0-125 Pa
2	$\pm 0.25$ , 0-0.25, $\pm 0.125$ , 0-0.125"WC / $\pm 60$ , 0-60, $\pm 30$ , 0-30 Pa

CODE	Alarm Output
R	Alarm relay, N.O. 2 Amp

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

### OPTIONAL 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 (switch selectable)

### OPTIONAL ALARM FUNCTIONS

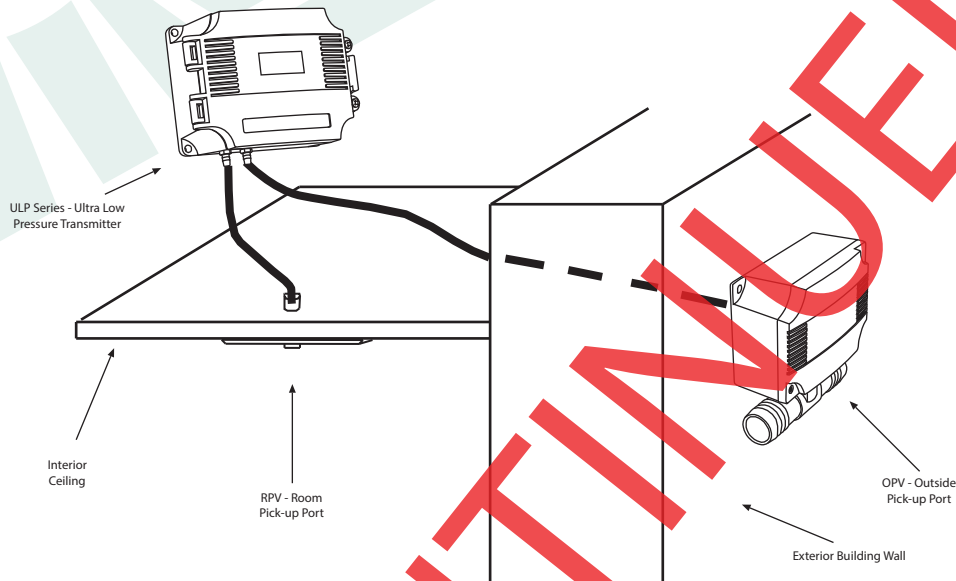
Alarm Relay Output.....N.O. contact, 2 Amps @ 120 Vac  
or 30 Vdc  
Alarm Relay Trip Point.....Adjustable over the pressure  
range (forward or reverse acting)  
Alarm Relay Delay.....10 or 60 Seconds, switch selectable

## TYPICAL INSTALLATION:

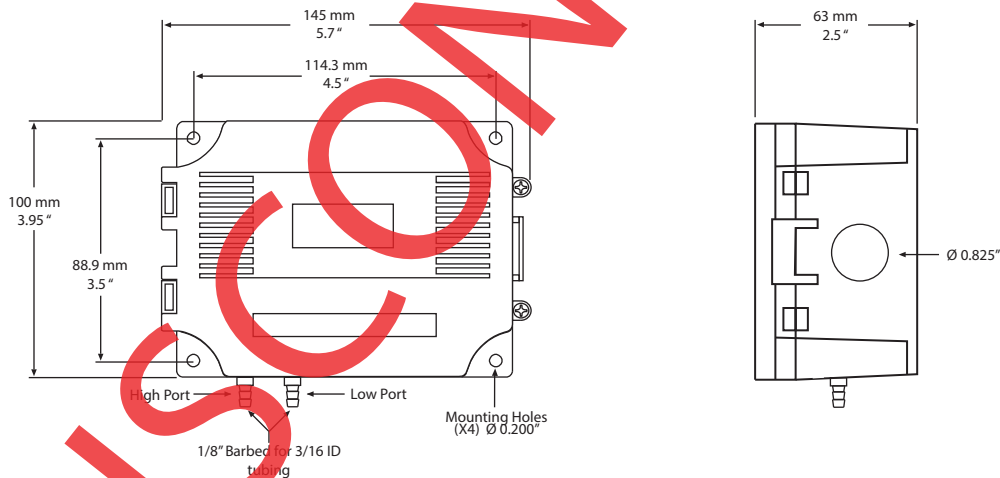
For complete installation and wiring details, please refer to the product installation instructions.

The ULP mounts on any surface using the four holes provided on the base of the unit. Make sure there is enough space around the unit to connect the pressure tubing without kinking and avoid locations where severe vibrations or excessive moisture are present.

The unit may be mounted in any position but typically is installed on a vertical surface with pressure ports on the bottom and the cable entrance on the right. The enclosure has a standard opening for a 1/2" conduit and may be installed with either conduit and a conduit coupler or a cable gland type fitting.



## DIMENSIONS:



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Greystone Energy Systems, Inc.  
150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7  
(506) 853-3057 Fax: (506) 853-6014  
North America: 1-800-561-5611  
e-mail: mail@greystoneenergy.com  
www.greystoneenergy.com

**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**