



# GREYSTONE

ENERGY SYSTEMS INC

## ULTRA LOW PRESSURE TRANSMITTER - BACnet ULP Series

The Ultra Low Pressure Transducer is used to measure differential pressure up to 1"wc or 250 Pa and transmit via BACnet Communications. 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 warmup, long term instability and position sensitivity. It is ideal for monitoring pressure for air or other clean inert gas. It features bi-directional pressure measurement, an on-board auto-zero function, a backlit LCD to display the pressure value and an alarm relay with variable trip points. The device is field-configurable via the local menu or the BACnet connection.

### SPECIFICATION:

Pressure Ranges.....	ULP1BAC - $\pm 1$ " WC or $\pm 250$ Pa ULP2BAC - $\pm 0.25$ " WC or $\pm 60$ 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 .....	1 to 60 Seconds, menu or BACnet selectable
Proof Pressure.....	100 "WC (24.9 kPa) for ULP1, 40 "WC (9.96 kPa) for ULP2
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 via BACnet
Power Supply.....	24 Vac/dc $\pm 10\%$
Power Consumption .....	50 mA max.
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.....	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)
<b>BACnet COMMUNICATIONS</b>	
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)



### PART NUMBER SELECTED

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### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
ULP	Ultra Low Pressure Transmitter

CODE	Pressure Ranges
1	$\pm 1$ " WC or $\pm 250$ Pa
2	$\pm 0.25$ " WC or $\pm 60$ Pa

CODE	Communications
BAC	BACnet Communications

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

### 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)

### ALARM FUNCTIONS

Alarm Relay Output .....	N.O. contact, 2 Amps @ 120 Vac or 30 Vdc
Alarm Relay Trip Point .....	Upper and Lower alarms adjustable over the pressure range
Alarm Relay Delay .....	0 to 10 Minutes, menu or BACnet selectable



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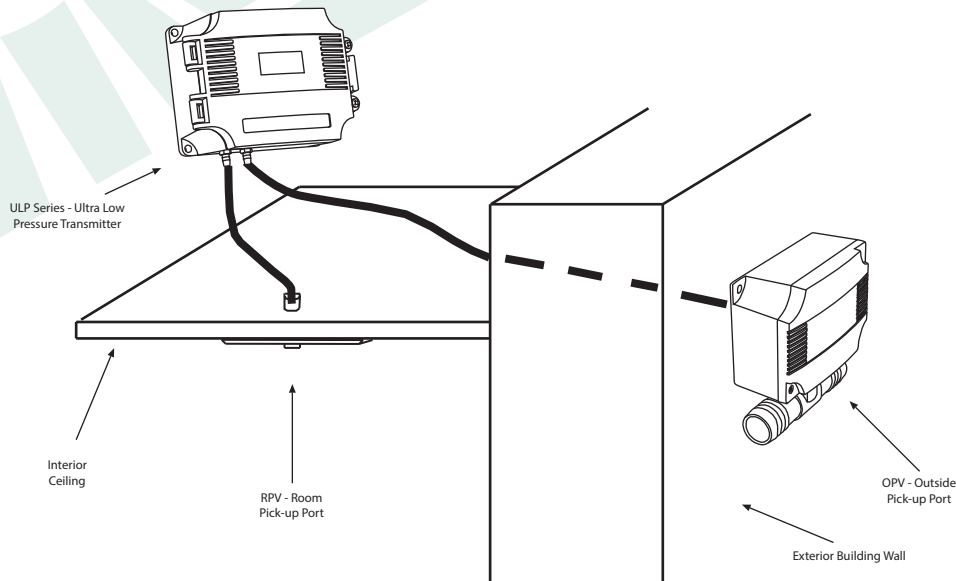


## TYPICAL INSTALLATION:

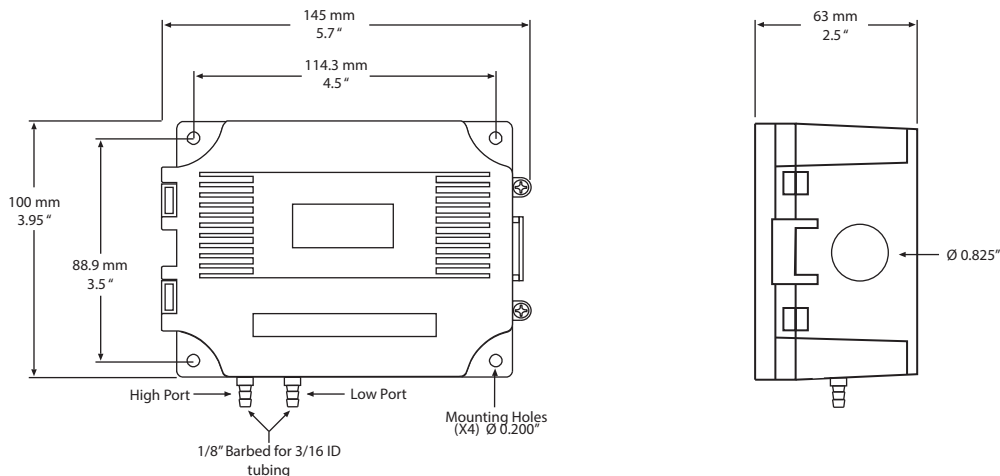
For complete installation and wiring details, please refer to the product installation instructions.

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. 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**