



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 ± 250 Pa ULP2BAC - $\pm 0.25"$ WC or ± 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) |

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) |



PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

| MODEL | Product Description |
|-------|--------------------------------|
| ULP | Ultra Low Pressure Transmitter |

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

| CODE | Communications |
|------|-----------------------|
| BAC | BACnet Communications |

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

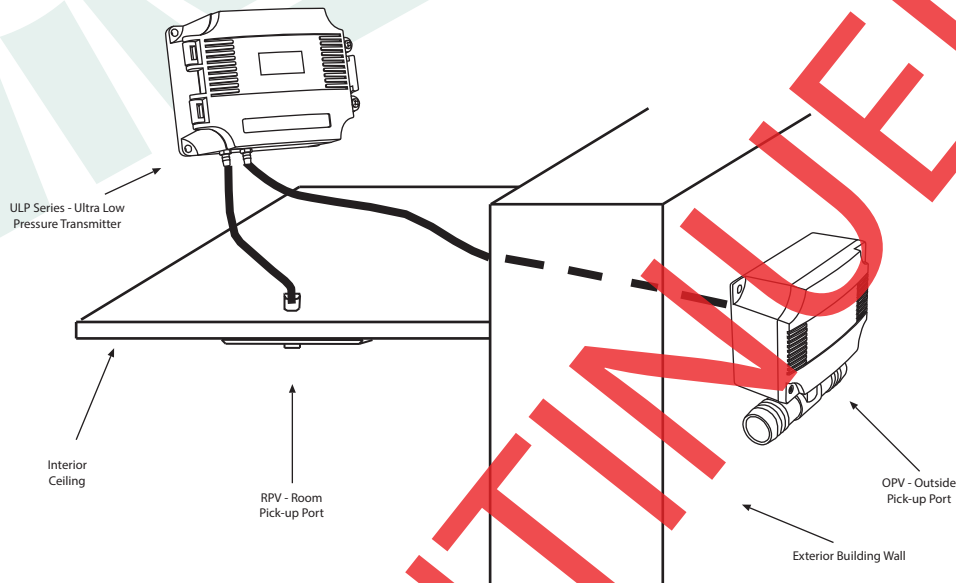
| | |
|------------------------------|--|
| Alarm Relay Output | N.O. contact, 2 Amps @ 120 Vac or 30 Vdc |
| Alarm Relay Trip Point | Upper and Lower alarms adjustable over the pressure range |
| Alarm Relay Delay | 0 to 10 Minutes, menu or BACnet selectable |

TYPICAL INSTALLATION:

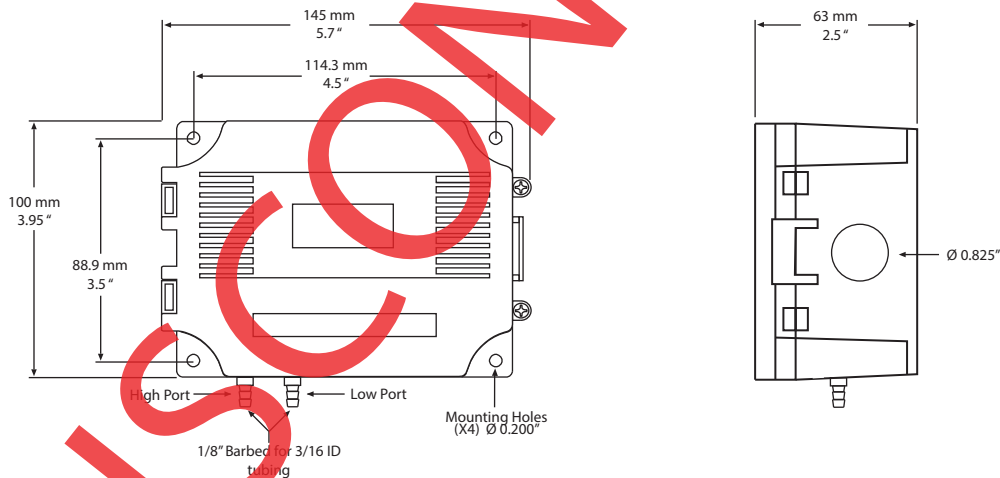
For complete installation and wiring details, please refer to the product installation instructions.

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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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