



GREYSTONE

ENERGY SYSTEMS INC

ULTRA LOW PRESSURE TRANSDUCER UP Series

The Ultra Low Pressure Transducer is used to measure differential pressure up to 1"WC or 250 Pa and transmit via Analog and 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 warm-up, 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 backlight 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. A weatherproof Polycarbonate enclosure with a hinged and gasketed cover is provided for ease of installation.

SPECIFICATIONS:

SENSOR

Accuracy..... $\pm 1\%$ F.S. of selected range
Pressure Ranges.....**UPB1B:** ± 250 Pa (± 1 "WC)
UPB2B: ± 60 Pa (± 0.25 "WC)
UPB1A: ± 250 , 0-250, ± 125 , 0-125 Pa (± 1 ", 0-1", ± 0.5 ", 0-0.5"WC)
UPB2A: ± 60 , 0-60, ± 30 , 0-30 Pa (± 0.25 ", 0-0.25", ± 0.125 ", 0-0.125"WC)

Stability..... $\pm 1\%$ F.S. (1 year)
Thermal Effect..... $\pm 2\%$ F.S. max, 10 to 40°C (50 to 104°F)
Response Time.....**BACnet®:** 1 to 60 seconds, menu or BACnet® selectable
Analog: 5 or 30 seconds, (switch selectable)

Proof Pressure.....**UPB1:** 24.9 kPa (100"WC)
UPB2: 9.96 kPa (40"WC)
Burst Pressure.....**UPB1:** 49.8 kPa (200"WC)
UPB2: 19.9 kPa (80"WC)

Operating Conditions.....0 to 50°C (32 to 122°F), 5 to 95 %RH, non-condensing
Media Compatibility.....Dry air or inert gas
Zero Adjustments.....Pushbutton, digital input auto zero, or via BACnet®

POWER SUPPLY

Power Supply.....24 Vac/dc $\pm 10\%$
Power Consumption.....**Analog:** 37 mA max
BACnet®: 52 mA max
Input Voltage Effect.....Negligible over specified operating range
Protection Circuitry.....Reverse voltage protected and output limited

OUTPUT

Output Signal.....**3 wire:** 4-20 mA, 0-5 or 0-10 Vdc, field selectable
Output Drive.....**4-20 mA:** 750 Ω max
Voltage: 2K Ω min

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/auto

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, via keypad or BACnet®

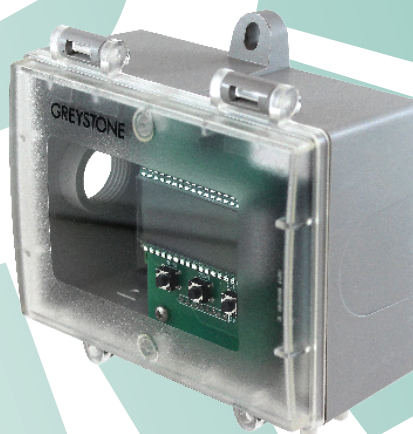
BACnet®

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)

GENERAL

Storage Temperature.....-30 to 60°C (-22 to 140°F)
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.....Polycarbonate UL94-V0, IP65 (NEMA 4X)
F style includes thread adapter (1/2" NPT to M16)
and cable gland fitting

Approvals.....RoHS, CE
Country of Origin.....Canada



PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
UP	Ultra Low Pressure Transducer

CODE	Enclosure
B	Polycarbonate with hinged and gasketed cover
F	Same as B, with thread adapter and cable gland fitting

CODE	Pressure Ranges - Analog*	BACnet®
1	250 Pa 125 Pa (1"WC, 0.5"WC)	± 250 Pa (± 1 "WC)
2	± 60 Pa, ± 30 Pa (± 0.25 "WC, ± 0.125 "WC)	± 60 Pa (± 0.25 "WC)

CODE	Output
A	Analog
B	BACnet®

CODE	Options
X	No Relay
R	Relay

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

*NOTE: All ranges field selectable, 0-XX or -XX to XX.



GREYSTONE ENERGY SYSTEMS, INC.

RoHS
COMPLIANT



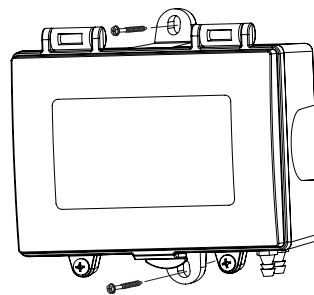
TYPICAL INSTALLATION:

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

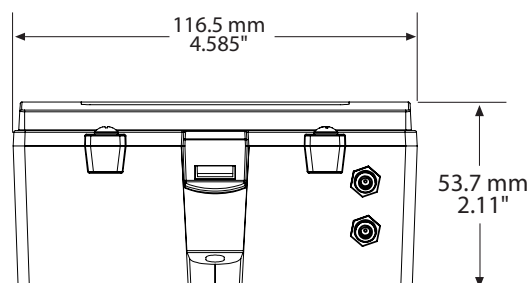
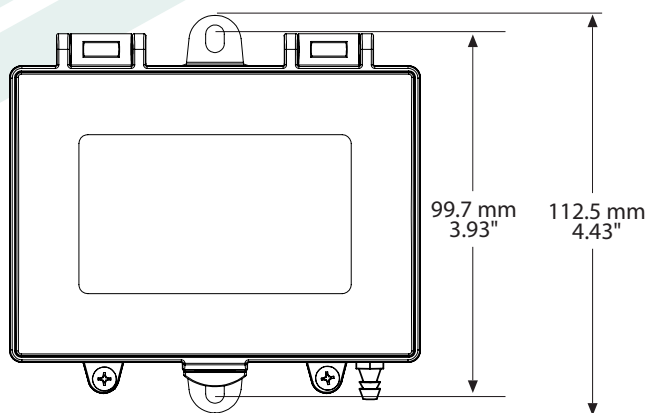
The UP mounts on any surface using the two holes provided on the base of the unit. Make sure there is enough space around the unit to connect the pressure tubing without kinking and avoid locations where severe vibrations or excessive moisture are present.

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 bottom. 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.

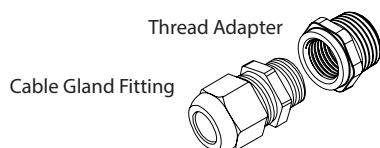
The enclosure provides mounting tabs for ease of installation.



DIMENSIONS:



Included with F style enclosure



GREYSTONE

ENERGY SYSTEMS INC

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/R 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