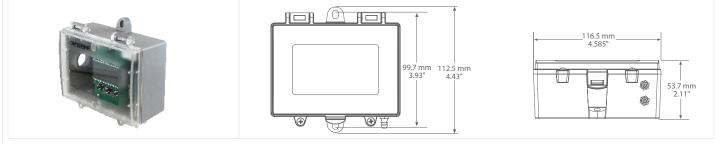


## **ULTRA LOW PRESSURE TRANSMITTER**



### **UP SERIES**

#### **PRODUCT DESCRIPTION**

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.

#### **TYPICAL INSTALLATION**

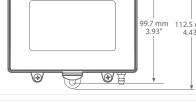
For complete installation and wiring details, please refer to the product installation instructions.

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.





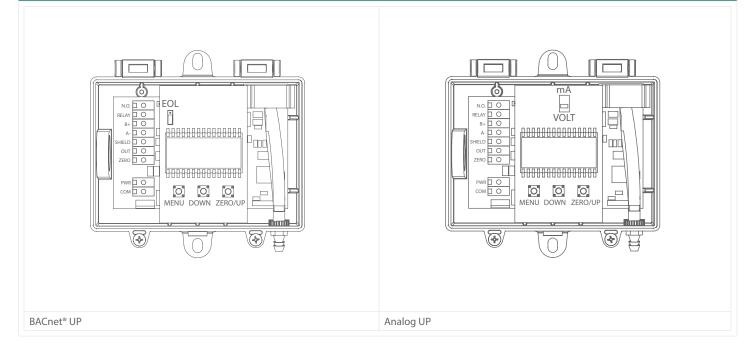
PRESSURE RANGE     UPB1B: ±1 "WC or ±250 Pa       UPB2B: ±0.25 "WC or ±60 Pa       UPB1A: ±1", 0-1", ±0.5", 0-0.5 "V	nu or BACnet <sup>®</sup> selectable
PRESSURE RANGE UPB1B: ±1 "WC or ±250 Pa UPB2B: ±0.25 "WC or ±60 Pa UPB1A: ±1", 0-1", ±0.5", 0-0.5 "V UPB2A: ±0.25", 0-0.25", ±0.125"   STABILITY <±1% F.S. 0. (1 year)   THERMAL EFFECTS ±2% F.S. maximum, 10 to 40°C   RESPONSE TIME BACnet*: 1 to 60 seconds, men Analog: 1 to 60 seconds, men   PROOF PRESSURE UPB1: 100 "WC (24.9 kPa)	VC, ±250, 0-250, ±125, 0-125 Pa ; 0-0.125 "WC, ±60, 0-60, ±30, 0-30 Pa (50 to 104°F) nu or BACnet <sup>®</sup> selectable
PRESSURE RANGE     UPB2B: ±0.25 "WC or ±60 Pa UPB1A: ±1", 0-1", ±0.5", 0-0.5 "V UPB2A: ±0.25", 0-0.25", ±0.125"       STABILITY     <±1% F.S. 0. (1 year)	, 0-0.125 "WC, ±60, 0-60, ±30, 0-30 Pa (50 to 104°F) nu or BACnet® selectable
THERMAL EFFECTS ±2% F.S. maximum, 10 to 40°C   RESPONSE TIME BACnet*: 1 to 60 seconds, men   PROOF PRESSURE UPB1: 100 "WC (24.9 kPa)	nu or BACnet <sup>®</sup> selectable
RESPONSE TIME BACnet®: 1 to 60 seconds, mer   PROOF PRESSURE UPB1: 100 "WC (24.9 kPa)	nu or BACnet <sup>®</sup> selectable
RESPONSE TIME     Analog: 1 to 60 seconds, menu       PROOF PRESSURE     UPB1: 100 "WC (24.9 kPa)	
PROOF PRESSURE	
BURST PRESSURE UPB1: 200 "WC (49.8 kPa) UPB2: 80 "WC (19.9 kPa)	
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 SUPPLY24 Vac/dc ±10%	
POWER CONSUMPTION Analog: 37 mA maximum BACnet*: 52 mA maximum	
INPUT VOLTAGE EFFECT Negligible over operating range	e
PROTECTION CIRCUITRY Reverse voltage protected and	output limited
OUTPUT SIGNAL 3-Wire: 4-20 mA, 0-5 or 0-10 Vo	dc, field selectable
OUTPUT DRIVE CAPABILITIES     Current: 750 Ω maximum       Voltage: 2,000 Ω min     Voltage: 2,000 Ω	
Size: 38.1 x 16.5 mm (1.5" x 0.6       DISPLAY     Digit Height: 11.43 mm (0.45"       Symbols: "WC, Pa     Backlight: Enable/disable/autored	)
ALARM FUNCTIONS Relay Output: N.O. contact, 2. Relay Trip Point: Upper and lo Relay Delay: 0 to 10 minutes,	wer alarms adjustable over the pressure range
BACnet <sup>®</sup> Communications: 2-Wire RS-4 Baud Rate: Locally set to 9600 MAC Address Range: Locally set	
STORAGE TEMPERATURE -30 to 60°C (-22 to 140°F)	
WIRING CONNECTIONS Screw terminal block	
PRESSURE CONNECTIONS Barbed ports for 1/8" to 3/16 IE	tubing
CONDUIT CONNECTION Access hole for 1/2" NPT condu	it or cable gland
ENCLOSURE B: Grey Polycarbonate UL94-V( F: Same as B, with thread adap	), IP65 (NEMA 4X) ter (1/2" NPT to M16) and cable gland fitting
APPROVALS CE, RoHS	
COUNTRY OF ORIGIN Canada	



# ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION



## PCB CONFIGURATIONS



ORDERING			
PRODUCT	UP	Ultra Low Pressure Transmitter	
NCLOSURE	B F	Polycarbonate with hinged and gasketed cover Same as B, with thread adapter & cable gland fitting	
RESSURE RANGES - SELECTABLE	1 2	Analog:     ±1 "WC, ±0.5 "WC, ±250 Pa, ±125 Pa     BACnet®:     ±1 "WC or ±250 Pa       Analog:     ±0.25 "WC, ±0.125 "WC, ±60 Pa, ±30 Pa     BACnet®:     ±0.25 "WC or ±60 Pa	
DUTPUT	A B	Analog BACnet®	
OPTIONS	X R	No relay Relay	

NOTE: 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





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