GREYSTONE
ENERGY SYSTEMS INC

ULTRA LOW PRESSURE TRANSMITTER

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.

PRODUCT HIGHLIGHTS

- Measure differential pressure up to 1” WC or 250 Pa
- provide either an analog or BACnet® compatible signal to a building automation system.
- LCD with user menu
- Four selectable pressure ranges
- RS-485 network with either BACnet® protocol
- Onboard auto zero function
- Alarm output with adjustable high and low alarms
- Weatherproof Enclosure

GREYSTONE
ENERGY SYSTEMS INC

SPECIFICATIONS

DESCRIPTION	ENGINEERING SPEC
PRESSURE RANGES	UPB1B: ±1 “WC or ±250 Pa UPB2B: ±0.25 “WC or ±60 Pa UPB1A: ±1”, 0-1”, ±0.5”, 0-0.5 “WC, ±250, 0-250, ±125, 0-125 Pa UPB2A: ±0.25”, 0-0.25”, ±0.125”, 0-0.125 “WC, ±60, 0-60, ±30, 0-30 Pa
ACCURACY	±1% F.S. of selected range @ 22°C (72°F) including hysteresis, non-linearity and repeatability
STABILITY	±1% FS max (1 year)
THERMAL EFFECTS	±2% F.S. maximum, 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
MEDIA COMPATIBILITY	Dry air and inert gas
PROOF PRESSURE	UPB1: 100 “WC (24.9 kPa) UPB2: 40 “WC (9.96 kPa)
BURST PRESSURE	UPB1: 200 “WC (49.8 kPa) UPB2: 80 “WC (19.9 kPa)
ZERO ADJUSTMENT	Pushbutton auto-zero
POWER SUPPLY	24 Vac/dc, ±10%
CONSUMPTION	Analog: 37 mA maximum BACnet®: 52 mA maximum
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
INPUT VOLTAGE EFFECT	Negligible over specified operating range
LCD 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
OUTPUTS	3-Wire: 4-20 mA, 0-5 or 0-10 Vdc, field selectable
OUTPUT DRIVE	Current: 750Ω max Voltage: 2000Ω min
PRESSURE CONNECTIONS	Barbed ports for 1/8” to 3/16 ID tubing
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
ALARM FUNCTION	Relay Output: N.O. contact, 2 Amps @ 120 Vac or 30 Vdc Relay Trip Point: Upper and lower trip levels adjustable over the pressure range Relay Delay: 0 to 10 minutes (menu selectable)
BACNET COMMUNICATION	Communications: 2 wires 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)
OPERATING CONDITIONS	0 to 50°C (32 to 122°F), 5 to 95 %RH, non-condensing
STORAGE TEMPERATURE	-30 to 60°C (-22 to 140°F)
ENCLOSURE	B: Grey Polycarbonate UL94-V0, IP65 (NEMA 4X) F: Same as B, with thread adapter (1/2” NPT to M16) and cable gland fitting
CONDUIT CONNECTION	Access hole for 1/2” NPT conduit or cable gland
APPROVALS	CE, RoHS

COUNTRY OF ORIGIN	Canada