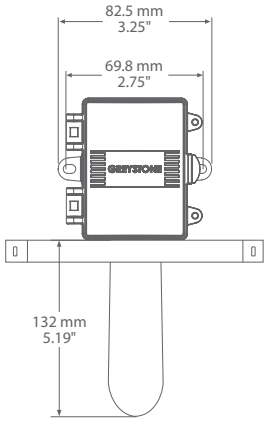
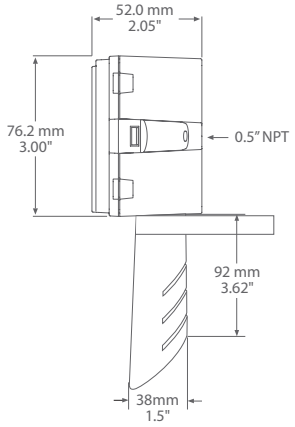
GREYSTONE
ENERGY SYSTEMS INC

# OUTSIDE TEMPERATURE TRANSMITTER

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## TXOB SERIES

## PRODUCT DESCRIPTION

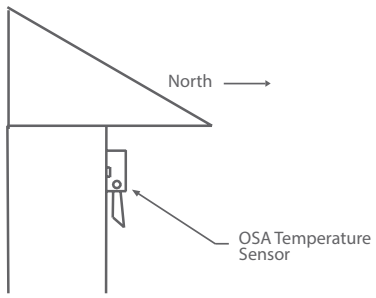
The single point outside temperature transmitter utilizes a precision platinum RTD sensor. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. A sun and wind shield is integrated into the enclosure. It is provided in a weatherproof Polycarbonate enclosure. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is available with various ranges.

## TYPICAL INSTALLATION

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

The TXOB should be mounted on an outside north facing wall, under the eaves to provide protection from direct sunlight.

The TXOB can be mounted directly to the building's wall face using the provided mounting holes. A 0.85" hole for conduit connection or cable gland fitting is provided.




## SPECIFICATIONS

| | |
|---|---|
| SENSOR TYPE | 1000 Ω platinum RTD |
| SENSOR ACCURACY | ±0.3°C (±0.54°F) @ 0°C (32°F) |
| PROBE SENSING RANGE | -40 to 60°C (-40 to 140°F) |
| WIRE MATERIAL | PVC insulated, parallel bonded, 22 AWG |
| SUN/WIND SHIELD | White polycarbonate, vented |
| OUTPUT SIGNAL | 4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured) |
| TRANSMITTER ACCURACY | ±0.1% of span, including linearity |
| OUTPUT DRIVE @ 24 VDC | **Current:** 600 mA maximum<br>**Voltage:** 10 KΩ minimum |
| MAXIMUM OUTPUT (VOLTAGE) | Limited to <5.5 Vdc or 0-5 Vdc, <10.5 for 0-10 Vdc |
| INPUT VOLTAGE EFFECT | Negligible over specified operating range |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| AMBIENT OPERATING RANGE | -40 to 60°C (-40 to 140°F), 5 to 95 %RH non-condensing |
| ENCLOSURE | **A:** Polycarbonate, UL94-V0, IP65 (NEMA 4X)<br>**E:** Same as A, with cable gland fitting |
| TERMINATION | Screw terminal block (14 to 22 AWG) |
| APPROVALS | CE |
| PROTECTION CLASS | III |
| POWER SOURCE UL | 0-5 Vdc: 10-35 Vdc or 10-28 Vac SELV (Class 2)<br>0-10 Vdc: 15-35 Vdc or 15-28 Vac SELV (Class 2)<br>4-20 mA: 15-35 Vdc (loop-powered) or 22-28 Vac Limited Energy, <15W |
| CONSUMPTION | Current @ 20 mA<br>Voltage @ 5 mA |
| EU CONFORMITY | CE |
| CERTIFICATION | UL 60730 & CSA E60730 |
| PURPOSE OF CONTROL | Operating Control |
| ENCLOSURE | UL Enclosure Type 3R , Raintight |
| TYPE OF ACTION | Type 1 |
| IMPULSE VOLTAGE | 330V |
| POLLUTION DEGREE | 4 |
| COUNTRY OF ORIGIN | Canada |

NOTE: This product is factory calibrated and any field adjustment will void the warranty.

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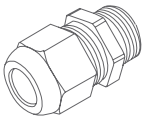
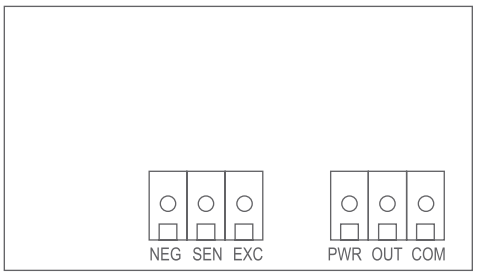
## ACCESSORY - INCLUDED WITH E ENCLOSURE OPTION



CABLE GLAND FITTING

## WIRING INFORMATION




| TERMINAL | FUNCTION |
|---|---|
| PWR | Power Supply |
| OUT | Analog Output |
| COM | Common |
| NEG | |
| SEN | Temperature Sensor Input |
| EXC | |

## ORDERING

| | | |
|---|---|---|
| PRODUCT | **TXOB** | Outside Temperature Transmitter with Sun and Wind Shield |
| ENCLOSURE | **A**<br>**E** | Polycarbonate, weatherproof with hinged and gasketed cover<br>Same as A, with cable gland fitting |
| SENSOR | **12X** | 1000 Ω Platinum, IEC 751, 385 Alpha, thin film |
| OUTPUT | **A**<br>**D**<br>**E** | 4-20mA<br>0-5 Vdc<br>0-10 Vdc |
| SCALED RANGE | **001**<br>**002**<br>**006** | 0 to 35°C (32 to 95°F)<br>0 to 50°C (32 to 122°F)<br>-50 to 50°C (-58 to 122°F) |

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

## PART NUMBER

**TXOB**

RoHS COMPLIANT

Greystone Energy Systems, Inc.
150 English Drive, Moncton,
New Brunswick, Canada E1E 4G7

Ph: +1 (506) 853-3057 Fax: +1 (506) 853-6014
North America: 1-800-561-5611
E-mail: mail@greystoneenergy.com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