



# GREYSTONE ENERGY SYSTEMS INC

## RIGID DUCT AVERAGE TEMPERATURE TRANSMITTER TXDR Series

The multi point rigid duct average temperature transmitter incorporates numerous precision platinum RTD's at equal distances encapsulated in a 6.00 mm (0.236") OD, 304 series stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is available with various ranges.

### SPECIFICATION:

Sensor Type.....1000 ohm Platinum RTD  
 Sensor Accuracy.....±0.3°C (±0.94°F) @ 0°C (32°F)  
 Probe Sensing Range.....-20 to 60°C (-4 to 140°F)  
 Wire Material.....PVC insulated, parallel bonded, 22AWG  
 Probe Material.....304 Series Stainless Steel  
 Probe Diameter.....6 mm (0.236")  
 Standard Lengths.....300, 450, 600, 900 mm  
 (12', 18', 24', 36")  
 Output Signal.....4-20mA current loop, 0-5 Vdc, or 0-10 Vdc  
 (factory configured)  
 Transmitter Accuracy.....±0.1% of span, including linearity  
 4-20 mA loop power supply.....15-35 Vdc or 22-32 Vac  
 Minimum Loop Current.....2 mA nominal (occurs with shorted sensor)  
 Maximum Loop Current.....22.5 mA nominal (occurs with open sensor)  
 Maximum Loop Load.....>600 ohms  
 0-5 Vdc Power Supply.....10-35 Vdc or 10-32 Vac  
 0-10 Vdc Power Supply.....15-35 Vdc or 15-32 Vac  
 Maximum Current (Voltage).....5 mA nominal  
 Maximum Output (Voltage).....limited to <5.5 Vdc for 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.....0 to 50°C (32 to 122°F), 0 to 95% RH non-condensing  
 Enclosure.....ABS - UL94-V0, IP65 (NEMA4X)  
 E - includes thread adapter (1/2" NPT to M16),  
 and cable gland fitting  
 Wiring Connections.....Screw terminal block (14 to 22 AWG)  
 Country of Origin.....Canada

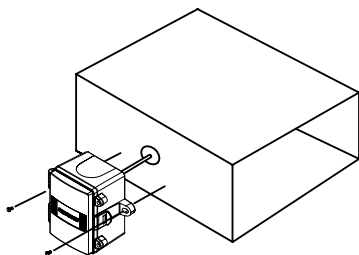
\*This product is factory calibrated and any field adjustment will void the warranty.

### TYPICAL INSTALLATION:

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

The duct type probes are installed through a hole in the side of the duct to monitor a single point temperature within the duct. Since the probes are tip sensitive, select a probe length that places the sensor well into the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

The enclosure provides mounting tabs for ease of installation.



### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
TXDR	Rigid Duct Average Temperature Transmitter

CODE	Enclosure
A	ABS, with hinged & gasketed cover
E	Same as A, with thread adapter & cable gland fitting

CODE	Sensor
12	10,000 Ω Platinum, IEC 751, 385 Alpha, thin film (Standard)

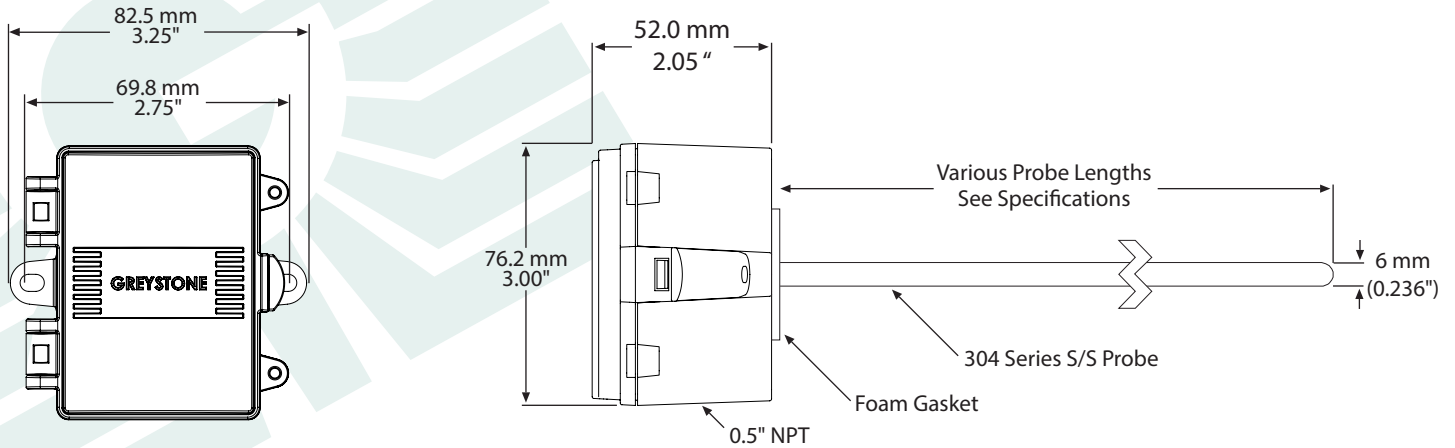
CODE	Probe Length
F	450 mm (18")
G	600 mm (24")
H	900 mm (36")

CODE	Output
A	4-20 mA
D	0-5 Vdc
E	0-10 Vdc

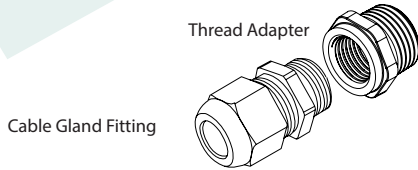
CODE	Scaled Range
001	0 to 35°C (32 to 95°F)
002	0 to 50°C (32 to 122°F)
006	-50 to 50°C (-58 to 122°F)
*	Custom Ranges Available

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

## DIMENSIONS:



Included with E style enclosure



# GREYSTONE

**ENERGY SYSTEMS INC**

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**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