



# GREYSTONE

ACCURACY BY DESIGN

## RIGID DUCT AVERAGE TEMPERATURE TRANSMITTER TE500DR Series

The TE500DR series multi point rigid duct average temperature transmitter incorporates numerous precision platinum RTD's at equal distances and 6.35 mm (0.25") OD, 304 series stainless steel probe and is available in various lengths (see ordering chart) 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. (See ordering chart).



### SPECIFICATION:

Operating Range:.....**Sensor:** -20 to 60 °C (-4 to 140 °F)  
**PCB:** 0 to 70 °C (32 to 158 °F)

Wire Material:.....FT-6 Plenum-rated

Probe Material:.....304 Series Stainless Steel

Probe Dimensions:.....0.25" (6.35 mm) Diameter

Enclosure:.....Standard - ABS - UL94-V - NEMA 12 (IP64)  
 Round (E) - ABS - NEMA 12 (IP64)  
 Metal (M) - Gal. Steel - NEMA 1 (IP30)  
 Weatherproof (W) - Cast Alum. NEMA 3R (IP64)

Output Signal:.....**Current:** 4-20mA current loop  
**Voltage:** 0-5 or 0-10 Vdc

Transmitter Accuracy:.....±0.1% of span, including linearity

Power Supply:.....**Current:** 15-35 Vdc or 22-32 Vac  
**Voltage:** 0-5 vdc: 10-35 Vdc or 10-32 Vac  
 0-10 Vdc: 15-35 vdc or 15-32 Vac

Consumption:.....**Current:** 22 mA Max. (Occurs with open sensor)  
**Voltage:** 5 mA nominal

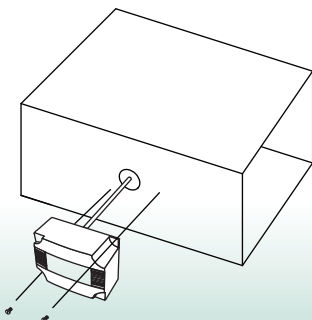
Connections:.....Screw terminal block (14 to 22 AWG)

### TYPICAL INSTALLATION:

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

The rigid duct average type probes are installed in the side of the duct to monitor an average temperature within the duct. Select a probe length that allows the probe to span the duct width. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Each enclosure style provides mounting tabs on the outside of the enclosure for ease of installation.



### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
TE500DR	Rigid Duct Average Temperature Sensor

CODE	Enclosure (ABS enclosure is standard)
-	ABS enclosure, standard (no code required, leave blank)
M	Metal utility box
E	Round ABS, w/gasketed cover
W	Aluminum weatherproof box

CODE	Sensor
2	PT100-100 Ω Platinum, IEC 751, 385 Alpha, thin film
12	PT1000-1000 Ω Platinum, IEC 751, 385 Alpha, thin film

CODE	Probe Length
K2	450 mm (18")
L2	600 mm (24")
M2	900 mm (36")

CODE	Transmitter Output Signal
1A	Current 4-20mA
1D	Voltage 0-5 Vdc
1E	Voltage 0-10 Vdc

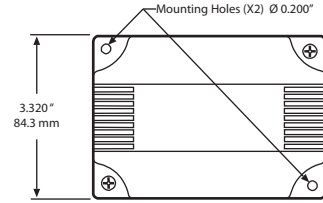
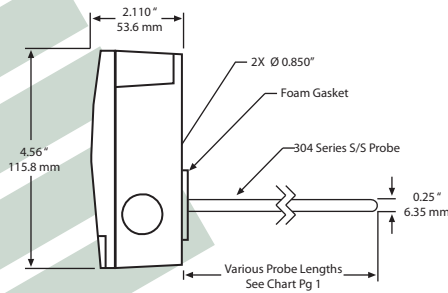
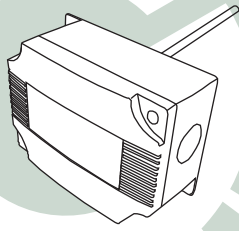
CODE	Transmitter Range
1	0 - 35°C (32 - 95°F)
2	0 - 50°C (32 - 122°F)
6	-50 - 50°C (-58 - 122°F)
*	Custom range, please contact Greystone

TE500DR - 12 K2 1A 2

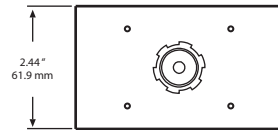
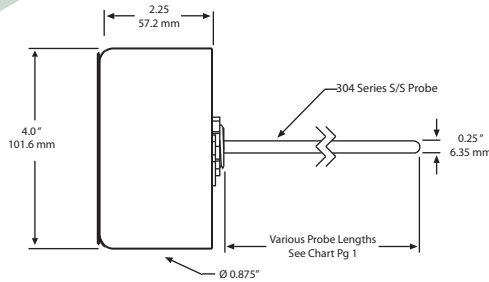
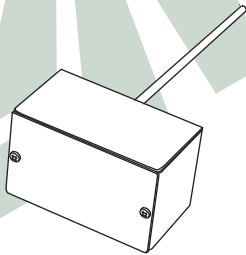
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

**\*Custom Range:**

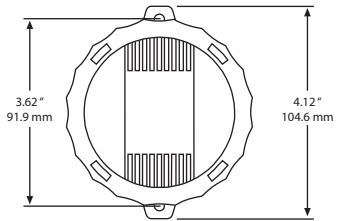
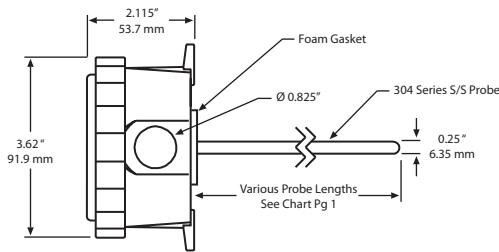
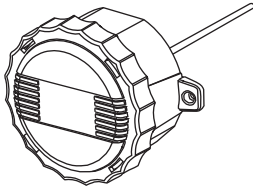
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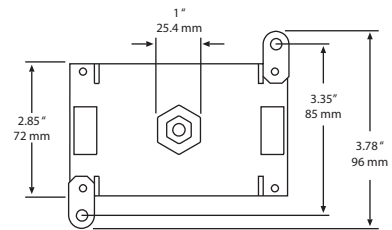
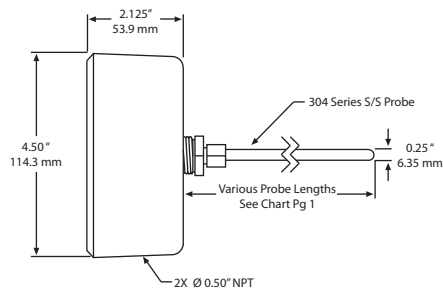
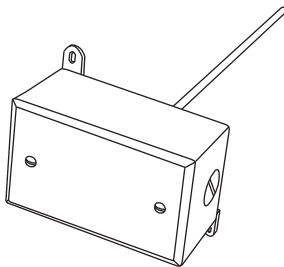
## ABS Enclosure



## Metal Enclosure (M)



## Round ABS Enclosure (E)



## Weatherproof Enclosure (W)



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**RoHS**  
COMPLIANT



*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transducers 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**