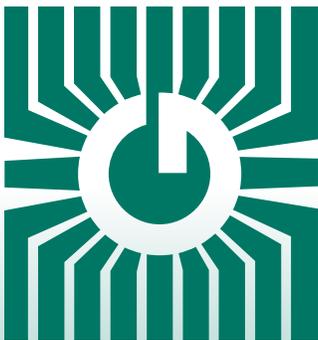


# GREYSTONE ENERGY SYSTEMS INC



## ROOM TEMPERATURE TRANSMITTERS TE500 Series



**AD) Designer** – Features include a two-piece enclosure that mounts directly to a wall box or on any wall.



**AS) Surface** - A stainless steel plate which can be mounted to a wall box used where tamper-proof or protection is required. Optional tamperproof screws are available.

### Precision temperature control/sensing

#### FEATURES:

- Precision RTD sensing element
- Choice of scaled ranges and outputs
- 2 enclosure styles
- Custom laser etching available

*Peace of mind  
through reliable  
temperature monitoring*

GREYSTONE HAS AN **ISO 9001** REGISTERED QUALITY SYSTEM

## DESCRIPTION:

The TE500 is a precision current loop temperature transmitter. It utilizes the platinum RTD and is available in various configurations. The transmitter provides a high accuracy signal with excellent long term stability, low hysteresis and fast response while being virtually immune to power supply noise and input voltage fluctuations. All models operate on a AC or DC power supplies.

## SPECIFICATIONS:

Sensor..... 1000 or 100 ohm Platinum RTD  
 Sensor Accuracy.....  $\pm 0.3^{\circ}\text{C}$  ( $\pm 0.54^{\circ}\text{F}$ ) @  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ )  
 Output Signal..... 4-20mA current loop, 0-5 vdc, 0-10 Vdc (factory configured)  
 Transmitter Accuracy.....  $\pm 0.1\%$  of span, including linearity  
 4-20 mA loop Power Supply.... 15-35 Vdc or 22-32 Vac  
 Minimum Current Loop ..... 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  
 RFI Rejection ..... Good RFI rejection of normal frequencies  
 Protection Circuitry..... Reverse voltage protected and output limited  
 Operating Conditions .....  $0 - 70^{\circ}\text{C}$  ( $32 - 158^{\circ}\text{F}$ ), 0-95% RH non-condensing  
 Enclosure..... White ABS (AD) - IP20 (NEMA 1) Stainless Steel (AS) - IP50 (NEMA 1)  
 Wiring Connections..... Screw terminal block 14 to 22 AWG)

## PRODUCT ORDERING INFORMATION:

MODEL	Product Description
TE500	Temperature Transmitter Series

CODE	Enclosure
AD	Designer
AS	Stainless Steel Plate

CODE	Sensor
2	100 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film
12	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film <b>(Standard)</b>

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

CODE	Scaled Transmitter Range
1	$0^{\circ}\text{C} - 35^{\circ}\text{C}$ ( $32^{\circ}\text{F} - 95^{\circ}\text{F}$ )
2	$0^{\circ}\text{C} - 50^{\circ}\text{C}$ ( $32^{\circ}\text{F} - 122^{\circ}\text{F}$ )

CODE	Options
TP	Tamperproof Screws <b>(AS only)</b>

TE500	AD	12	1A	2
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Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.



**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.*

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