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	±0.3˚C (±0.54˚F) @ 0˚C (32˚F)
Output Signal	4-20mA current loop, 0-5 vdc, 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 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˚C (32 - 158˚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

CODE	Enclosure
AD	Designer
AS	Stainless Steel Plate

CODE	Sensor
2	100 Ω Platinum, IEC 751, 385 Alpha, thin film
12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film **(Standard)**

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

CODE	Scaled Transmitter Range
1	0˚C - 35˚C (32˚F - 95˚F)
2	0˚C - 50˚C (32˚F - 122˚F

CODE	Options
TP	Tamperproof Screws **(AS only)**

TE500	AD	12	1A	2	-

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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