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

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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