



GREYSTONE

ENERGY SYSTEMS INC

STRAP-ON TEMPERATURE TRANSMITTER TE500E Series

The TE500E single point strap-on temperature transmitter incorporates a precision platinum RTD encapsulated in a 6.35 mm (0.25") OD, 304 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:

Sensor.....100 ohm Platinum RTD or
1000 ohm Platinum RTD
Sensor Accuracy..... $\pm 0.3^{\circ}\text{C}$ ($\pm 0.54^{\circ}\text{F}$) @ 0°C (32°F)
Probe Sensing Range..... -20 to 105°C (-4 to 221°F)
Wire Material.....PVC insulated, parallel bonded
(Type 2, 100 Ω Plat. uses FT4)
Wire Length.....1.524 m (5')
Probe Material.....304 Series Stainless Steel
Probe Dimension.....6.35 mm (0.25") Diameter
Output Signal.....4-20mA current loop, 0-5 vdc, or
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
Ambient Operating Range..... -40 - 85°C (-40 - 185°F), 0-95% RH
non-condensing
Enclosure.....ABS, UL94-5VB, IP61 (NEMA 12)
(E)-ABS, UL94-5VB, IP65 (NEMA 4X)
(M)- Gal. Steel, IP50 (NEMA 1)
(W)-Cast Aluminum IP64 (NEMA3X)
*In order to maintain the
published NEMA/IP ratings,
properly rated conduit or cable
gland adapters must be used.
Wiring Connections.....Screw terminal block
(14 to 22 AWG)



PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
TE500E	Strap-on Temperature Transmitter

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

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

CODE	Probe Length
A2	50 mm (2")
B2	100 mm (4")
C2	150 mm (6")
D2	200 mm (8")
E2	300 mm (12")
F2	450 mm (18")

CODE	Output
1A	4-20 mA
1C	0-5 Vdc
1E	0-10 Vdc

CODE	Scaled Range
1	$0-35^{\circ}\text{C}$ ($32-95^{\circ}\text{F}$)
2	$0-50^{\circ}\text{C}$ ($32-122^{\circ}\text{F}$)
3	$0-100^{\circ}\text{C}$ ($32-212^{\circ}\text{F}$)
*	Custom ranges available

TYPICAL INSTALLATION:

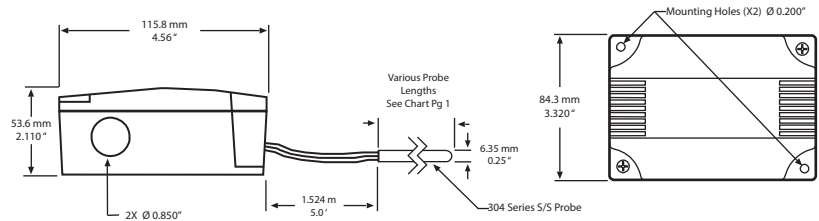
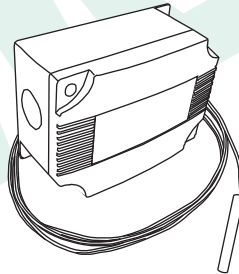
For complete installation and wiring details, please refer to the product installation instructions.

For best results, thermal conductive compound should be applied to pipe prior to mounting the probe.

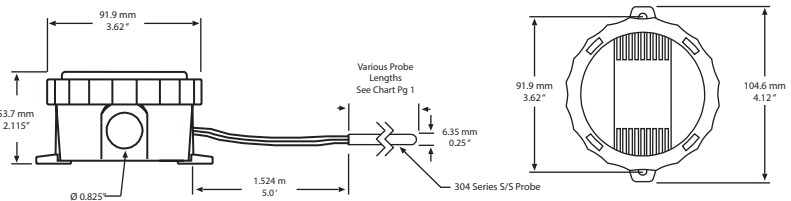
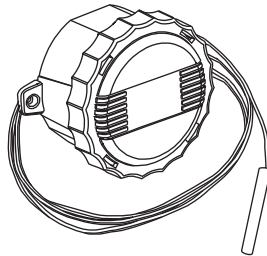
Find a suitable location along the pipe where both the probe and remote enclosure can be mounted. If necessary, remove a section of insulation from pipe. Position probe directly on the pipe and secure using a pipe clamp. For added security, make 1-3 loops of the sensor cable around the pipe and feed through wire hole on the enclosure and secure using the supplied grommet. If necessary, the pipe insulation can be re-applied to the pipe over the probe.

DIMENSIONS:

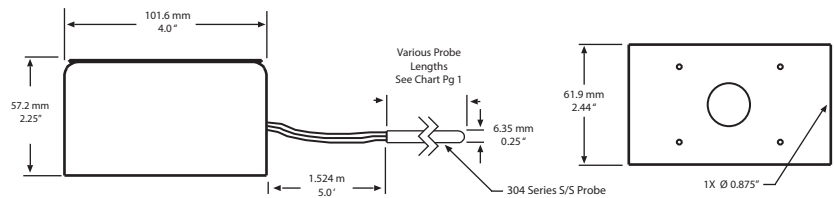
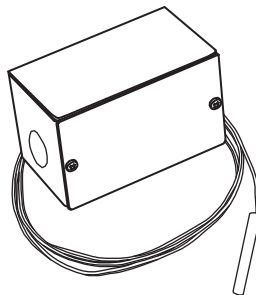
ABS Enclosure



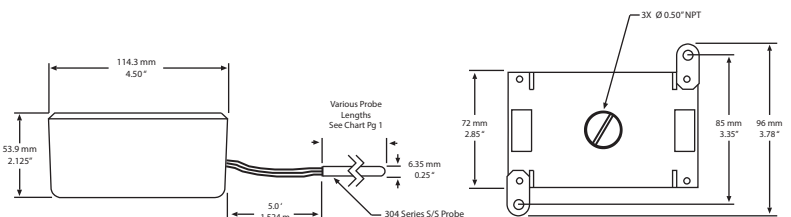
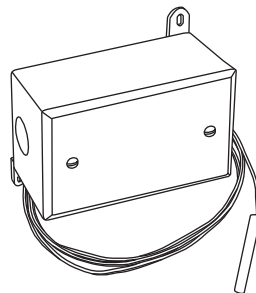
Round ABS Enclosure



Metal Enclosure



Weatherproof Enclosure



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



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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