GREYSTONE
ENERGY SYSTEMS INC

The TE500FL single point flying lead temperature sensor utilizes a precision sensor encapsulated in 6.35 mm (0.25") OD X 50 mm (2"), 304 series stainless steal probe. Standard wire lenght is 1.83 m (6'). All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. A transmitter that provides a high precision signal with excellent long term stability, low hysteresis and fast responce is provided.

SPECIFICATION:

Sensor...100 ohm Platinum RTD or 1000 ohm Platinum RTD
Sensor Accuracy......................................±0.3˚C (±0.54˚F) @ 0˚C (32˚F)
Probe Sensing Range...........................-20 to 60˚C (-4 to 140˚F)
Wire Material...FT-6 rated plenum cable, 22 AWG
Wire lenght..1.83 m (6')
Probe Material..304 series stainless steal
Probe Dimension...................................50 x 6.35 mm (2 x 0.25")
Output Signal...4-20mA current loop, 0-5 vcc, or 0-10 Vcc (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 Current Loop.......................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 Vcc Power Supply........................15-35 Vdc or 15-32 Vac
Maximum Current (Voltage)..............5 mA nominal
Maximum Output (Voltage)..............limited at <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 Range.......................................0 - 70˚C (32 - 158˚F), 0-95% RH non-condensing
Enclosure..ABS, UL94V, IP61 (NEMA 2) (E) - ABS, IP65 (NEMA 4X) (M) - Gal. Steel, IP50 (NEMA 1) (W) - Cast Alum. IP64 (NEMA3X)
Wire Connections..................................Screw terminal block (14 to 22 AWG)

TYPICAL INSTALLATION:

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

A typical application for the flying lead type probes is to monitor a single point temperature within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices. Drill a 3/8 hole in the top of the duct and hang the sensor in the airstream.

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

PART NUMBER SELECTED

PRODUCT ORDERING INFORMATION:

MODEL	Product Description
TE500FL	Flying Lead Temperature Transmitter

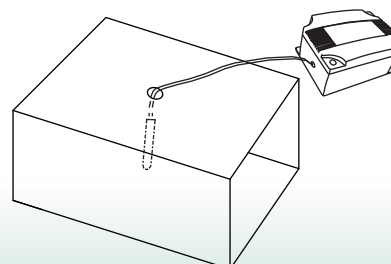| CODE	Enclosure (ABS enclosure is standard)
-	ABS enclosure, standard (no code needed, leave blank)
E	Round ABS c/w gasket cover
M	Metal utility box
W	Aluminum Weatherproof Box

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

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

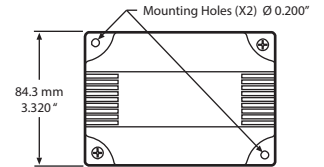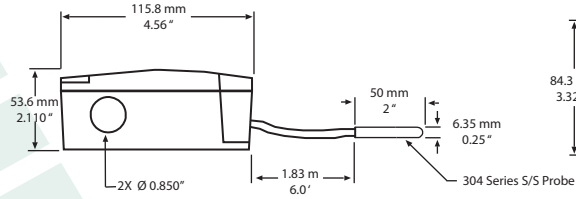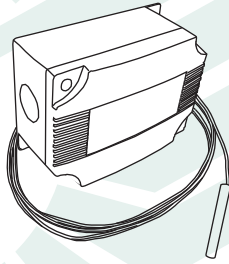| CODE	Transmitter Calibrated Range
1	0-35˚C (32-95˚F)
2	0-50˚C (32-122˚F)
*	Custom ranges available

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

Custom Calibrated Range:

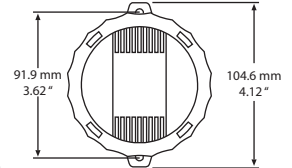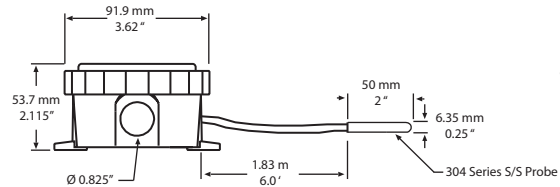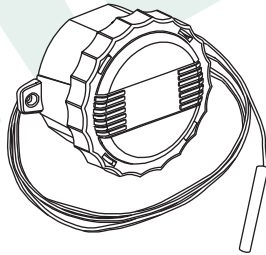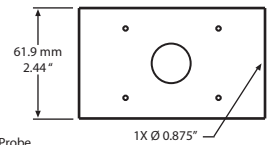# GREYSTONE ENERGY SYSTEMS, INC.

RoHS COMPLIANT

MADE IN CANADA

ISO9001

CE

DIMENSIONS:

ABS Enclosure

115.8 mm
4.56"

53.6 mm
2.110"

50 mm
2"

6.35 mm
0.25"

1.83 m
6.0'

2X Ø 0.850"

304 Series S/S Probe

Mounting Holes (X2) Ø 0.200"

84.3 mm
3.320"

Round ABS Enclosure

91.9 mm
3.62"

53.7 mm
2.115"

50 mm
2"

6.35 mm
0.25"

1.83 m
6.0'

Ø 0.825"

304 Series S/S Probe

91.9 mm
3.62"

104.6 mm
4.12"

Metal Enclosure

101.6 mm
4.0"

57.2 mm
2.25

50 mm
2"

6.35 mm
0.25"

1.83 m
6.0'

304 Series S/S Probe

61.9 mm
2.44"

1X Ø 0.875"
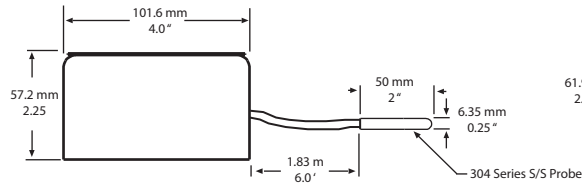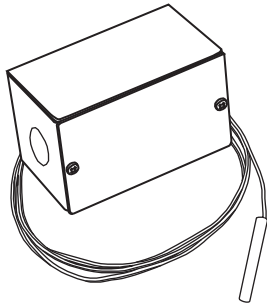
Weatherproof Enclosure
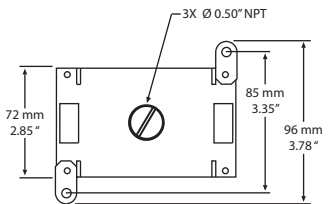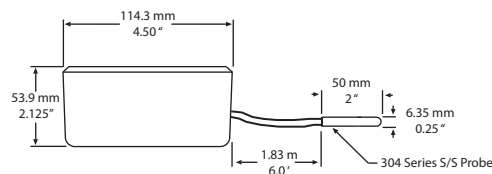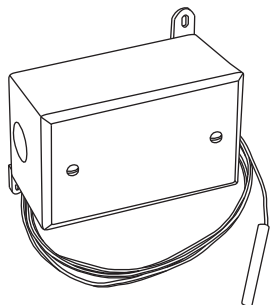
114.3 mm
4.50"

53.9 mm
2.125"

50 mm
2"

6.35 mm
0.25"

1.83 m
6.0'

304 Series S/S Probe

3X Ø 0.50" NPT

72 mm
2.85"

85 mm
3.35"

96 mm
3.78"

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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

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