GREYSTONE
ENERGY SYSTEMS INC

SLAB TEMPERATURE TRANSMITTER
TE500SL Series

The TE500SL single point slab temperature transmitter utilizes a precision sensor encapsulated in a thermal conductive coating and a transmitter that provides a high precision signal with excellent long term stability, low hysteresis and fast responce is provided. The TE500 SL is used to measure the temperature of a concrete slab. They are available with various wire types and lengths. All probes are constructed to provide excellent heat transfer, fast response and to resist moisture penetration.

SPECIFICATION:

Sensor	100 ohm Platinum RTD or 1000 ohm Platinum RTD
Sensor Accuracy	±0.3˚C (±0.54˚F) @ 0˚C (32˚F)
Probe Detection Range	**ZW:** -20 to 105˚C (-4 to 221˚F) **FT:** -20 to 60 ˚C (-4 to 140 ˚F) **MP:** -20 to 80 ˚C (-4 to 176 ˚F)
Wire Material	**ZW:** PVC Zip wire, 22 AWG **FT:** Plenum rated FT-6, 22 AWG **MP:** EPC Moisture proof, 22AWG
Wire length	Various - See Ordering Info
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
Operating Conditions	0 - 70˚C (32 - 158˚F), 0-95% RH non-condensing
Enclosure	ABS, UL94-5VB, IP61 (NEMA 2) (E) - ABS,UL94-5VB, IP65 (NEMA 4X) (M) - Gal. Steel, IP50 (NEMA 1) (W) - Cast Alum. IP64 (NEMA3X)
Wire Connections	Screw terminal block (14 to 22 AWG)

PART NUMBER SELECTED

PRODUCT ORDERING INFORMATION:

MODEL	Product Description
TE500SL	Slab Temperature Transmitter

CODE	**Enclosure** (ABS enclosure is standard)
-	ABS enclosure, standard (no code needed, leave blank)
M	Metal utility box
E	Round ABS c/w gasket cover
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	Wire Type
ZW	PVC Zip Wire - 22 AWG (1000 Ω Platinum Only)
FT	Plenum rated FT-6 - 22 AWG
MP	Moisture Proof Burial - 20 AWG

CODE	Wire Length
5	5' (1.5 m)
10	10' (3 m)
25	25' (7.6 m)
50	50' (15.25 m)
100	100' (30.5 m)
**	Custom, Please contact Greystone

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

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

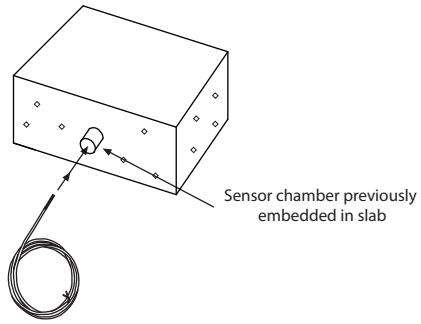
RoHS COMPLIANT

TYPICAL INSTALLATION:

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

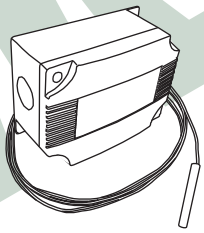
Typically a predetermined area is defined where the temperature reading is required. During concrete installation a sufficent length of conduit or copper tubing is imbedded from this point to an area that will be accessible once complete.

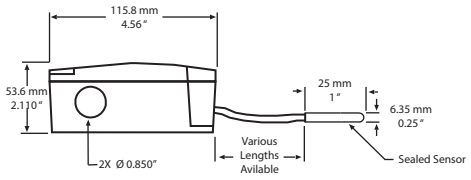
At the entrance to the sensor chamber, unravel the TE500SL and carefully insert sensor and feed into chamber until the chamber end is reached.

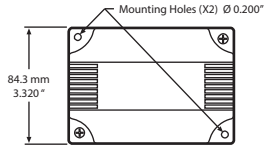


DIMENSIONS:

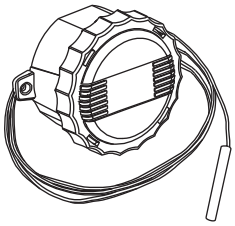
ABS Enclosure

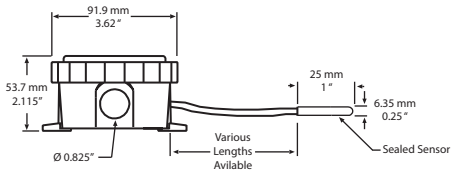


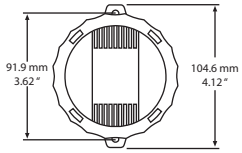




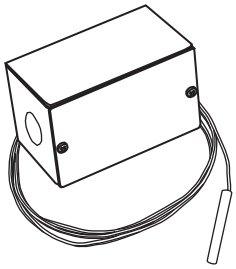
Round ABS Enclosure

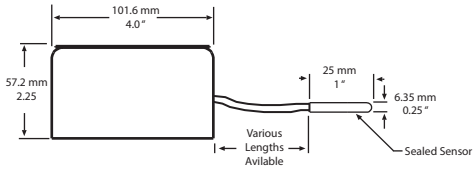


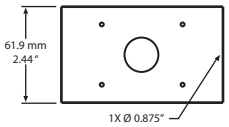




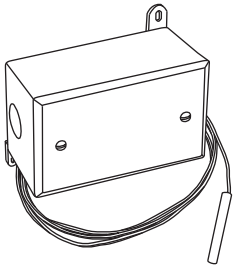
Metal Enclosure

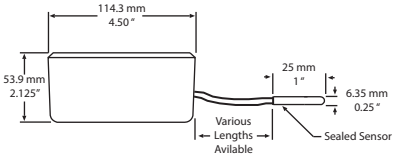


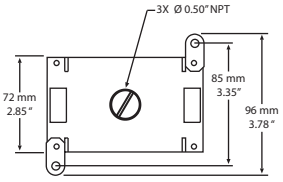




Weatherproof Enclosure







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

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