



GREYSTONE

ENERGY SYSTEMS INC

GLASS TEMPERATURE TRANSMITTER TE500G Series

The TE500G single point glass temperature sensor utilizes a precision sensor encapsulated in a 31.75mm L x 9.525mm W x 9.525 mm H (1.25" x .375" x .375") Aluminum probe. Standard wire length is 600 mm (24"). All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. It is available with a variety of enclosures. 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..... | ±0.3°C (±0.54°F) @ 0°C (32°F) |
| Probe Sensing Range..... | -20 to 105°C (-4 to 221°F) |
| Wire Material..... | PVC insulated, parallel bonded Type 2, 100Ω Plat. uses FT4) |
| Wire Length | 600 mm (24") |
| Probe Material | Aluminum |
| Probe Dimension..... | 31.75 x 9.525 x 9.525 mm 1.25" x .375" x .375") |
| Output Signal..... | 4-20mA current loop, 0-5 vdc, or 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 |
| 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 |
|--------|-------------------------------|
| TE500G | Glass 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) |

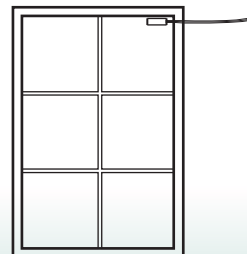
| CODE | Output |
|------|----------|
| 1A | 4-20 mA |
| 1C | 0-5 Vdc |
| 1E | 0-10 Vdc |

| CODE | Scaled Range |
|------|-------------------------|
| 1 | 0-35°C (32-95°F) |
| 2 | 0-50°C (32-122°F) |
| 3 | 0-100°C (32-212°F) |
| * | Custom ranges available |

TYPICAL INSTALLATION:

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

Find a suitable location on an exterior window where both the probe can be mounted. On one side apply epoxy compound and press firmly against the glass. Hold in place until the epoxy has set.



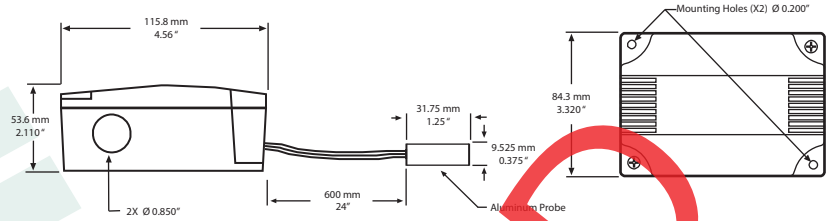
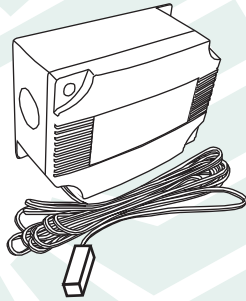
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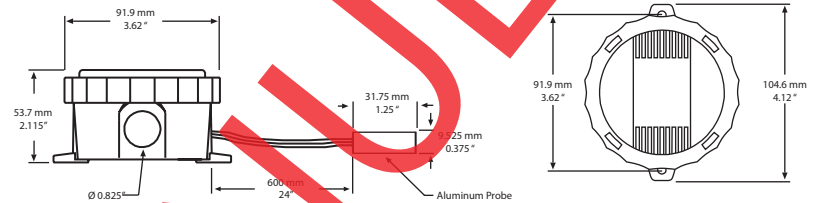
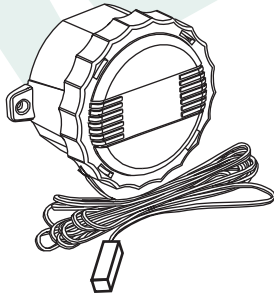


DIMENSIONS:

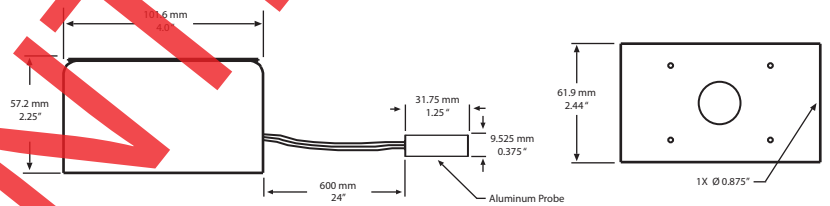
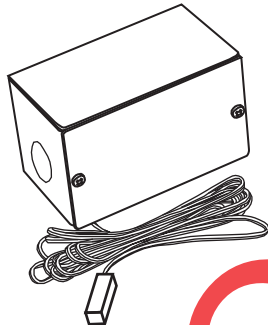
ABS Enclosure



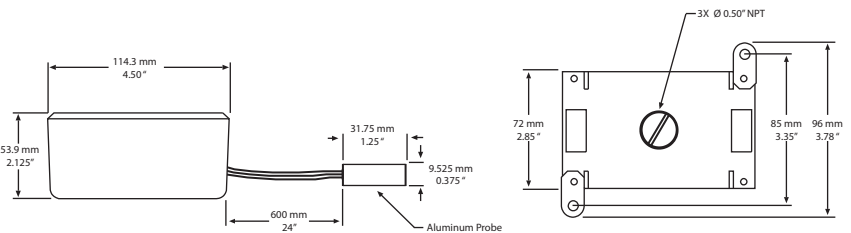
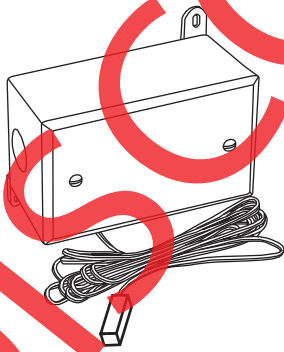
Round ABS Enclosure (E)



Metal Enclosure (M)



Weatherproof Enclosure (W)



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



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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