



GREYSTONE

ENERGY SYSTEMS INC

OUTSIDE TEMPERATURE TRANSMITTER TE500F Series

The TE500F, single point outside air temperature sensor utilizes a precision platinum RTD sensor. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. A sun and wind shield is integrated into the enclosure. It is provided in a weatherproof ABS enclosure. 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.....	-40 - 85°C (-40 - 185°F)
Wire Material.....	PVC insulated, parallel bonded (Type 2, 100 Ω Plat. uses FT4)
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, IP64 (NEMA 4X) *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
TE500F	Outside Temperature Transmitter, Hinged ABS Weatherproof Enclosure

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
1D	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 $^{\circ}\text{F}$)
6	-50 - 50 $^{\circ}\text{C}$ (-58 - 122 $^{\circ}\text{F}$)

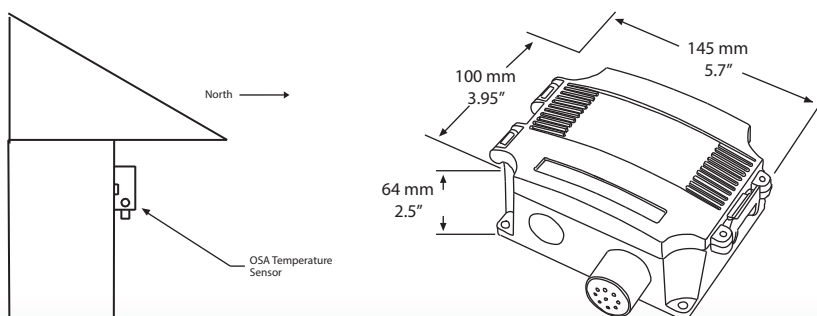
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

TYPICAL INSTALLATION:

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

The TE500F should be mounted on an outside North facing wall, under the eaves which will provide protection from direct sunlight.

The TE500F can be mounted directly to buildings wall face using the provided mounting holes. There is one 0.85" holes for conduit connection.



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