



# GREYSTONE

ENERGY SYSTEMS INC

## HIGH PRECISION OUTSIDE TEMPERATURE TRANSMITTER TE500F Series



The TE500F, single point outside air temperature sensor utilizes a high 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. The F series 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)

### APPLICATIONS:

- Laboratories
- Medical
- Pharmaceuticals
- Any application where high precision temperature monitoring is required

### SPECIFICATION:

Sensor Type:.....Platinum RTD  
100 or 1000  $\Omega$ , 385 Alpha @ 0°C

Operating Range:.....-20 to 85 °C (-58 to 158 °F)

Sensor Accuracy:.....**Class A:**  $\pm 0.15^\circ\text{C}$  @ 0°C  
**1/10 DIN:**  $\pm 0.03^\circ\text{C}$  @ 0°C

Output Signal:.....**Current:** 4-20 mA Current Loop  
**Voltage:** 0-5 or 0-10 Vdc  
(factory configured)

Transmitter Accuracy:..... $\pm 0.1\%$  of span, including linearity

Power Supply:.....**4-20 mA:** 15-35 Vdc or 22-32 Vac  
**0-5 vdc:** 10-35 Vdc or 10-32 Vac  
**0-10 Vdc:** 15-35 Vdc or 15-32 Vac

Consumption:.....**Current:** 22.5 mA Max (On open sensor)  
**Voltage:** 5 mA nominal

Wire Material:.....**18 & 22** PVC insulated, parallel bonded  
**37 & 38** uses FT-4

Enclosure:.....(F) - ABS - NEMA 3R (IP64), Hinged cover

Termination:.....2 or 3 wires  
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
18	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, Class A
22	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 1/10 DIN
37	100 $\Omega$ Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/10 DIN
38	100 $\Omega$ Platinum, 3 wire, IEC 751, 385 Alpha, thin film, Class A

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

CODE	Range
1	0-35°C (32 - 95°F)
2	0-50°C (32 - 122°F)
3	0-100°C (32 - 212°F)
6	-50 - 50°C (-58 - 122°F)

TE500F	18	1A	2
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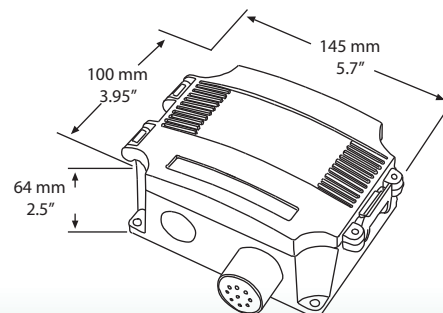
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

### 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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