

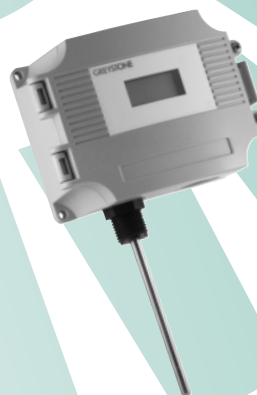


# GREYSTONE

ENERGY SYSTEMS INC

## IMMERSION TEMPERATURE TRANSMITTER w/ LCD TE511-512C Series

The TE511/512C single point immersion temperature transmitter incorporates a precision platinum RTD encapsulated in a 6.35 mm (0.25") OD, 304 stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resist moisture penetration. The transmitter provides a high accuracy signal with excellent long term stability, low hysteresis and fast response. It is available with various scaled ranges (See Product Selection Information). The LCD is provided in either °C (511) or °F (512).



### SPECIFICATION:

Sensor	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
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
Fitting Thread Size	1/2" NPT
Output Signal	4-20mA current loop, 0-5 vdc, or 0-10 Vdc (factory configured)
Transmitter Accuracy	±0.1% of span, including linearity
Power Supply	<b>4-20 mA:</b> 15-35 Vdc or 22-32 Vac <b>0-5 Vdc:</b> 10-35 Vdc or 10-32 Vac <b>0-10 Vdc:</b> 15-35 Vdc or 15-32 Vac <b>Current:</b> 22.5 mA Max (On open sensor) <b>Voltage:</b> 5 mA nominal
Consumption	Negligible over specified operating range
Input Voltage Effect	Good RFI rejection of normal frequencies
RFI rejection	Reverse voltage protected and output limited
Protection Circuitry	°C (511 Series) or °F (512 Series)
Display Units	3 digit for -88.8 to 888 as necessary
Display Range	24 mm x 11 mm (0.95" x 0.45")
Display Size	0 - 70°C (32 - 158°F), 0-95% RH non-condensing
Ambient Operating Range	ABS, UL94-5VB, IP65 (NEMA 4X)
Enclosure	*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
TE511C	Immersion Temperature Transmitter, c/w LCD Display °C
TE512C	Immersion Temperature Transmitter, c/w LCD Display °F

CODE	Probe Length
A2	50 mm (2")
B2	100 mm (4")
C2	150 mm (6")
D2	200 mm (8")
E2	300 mm (12")
F2	450 mm (18")

CODE	Output
A	Current 4-20 mA
D	Voltage 0-5 Vdc
E	Voltage 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 Contact Greystone

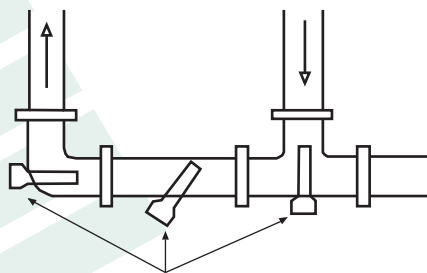
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

## TYPICAL INSTALLATION:

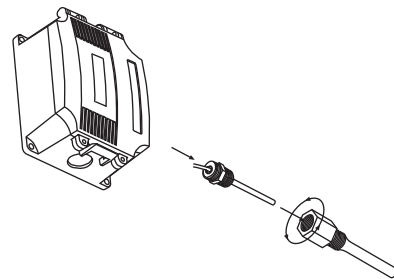
For complete installation and wiring details, please refer to the product installation instructions.

**NOTE: All immersion sensors require a thermowell (sold separately)**

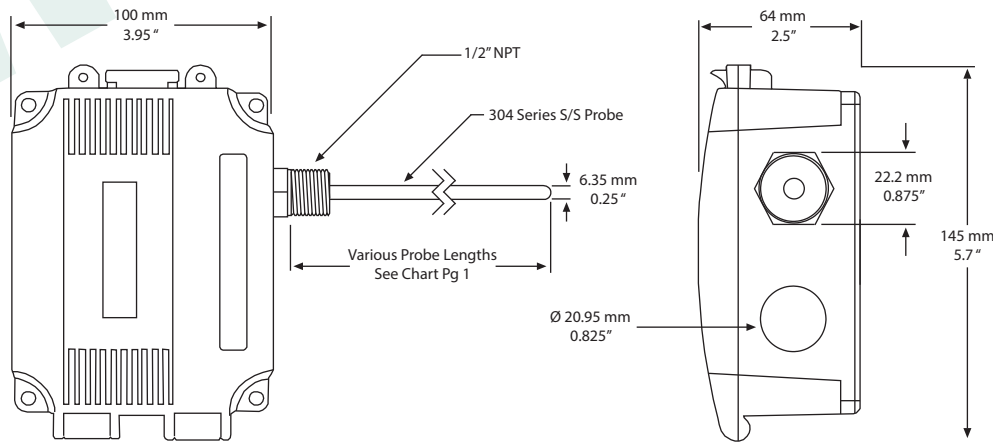
The immersion type probes are installed in the appropriate length thermowell for the pipe size. Thermal conductive compound should be added inside the thermowell to provide optimum thermal transfer.



Recommended thermowell placement in pipe



## DIMENSIONS:

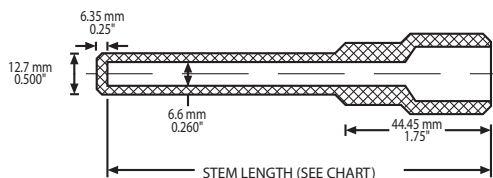
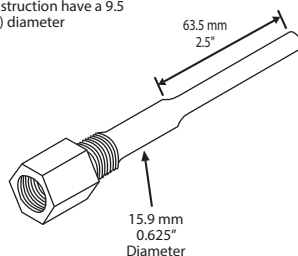
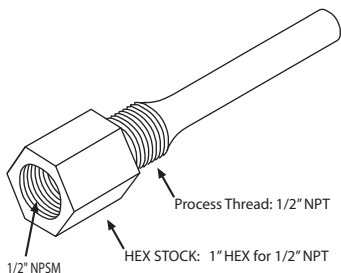


## ACCESSORIES:



NOTE:

6" and up machined thermowells have a two step stem as shown. welded construction have a 9.5 mm (0.375") diameter



THERMOWELL PART NUMBERING SYSTEM

SERIES NUMBER	NPT THREAD SIZE	MATERIAL	STEM LENGTH	CONSTRUCTION
T1	1/2"	P - 304 SS R - 316 SS	2" 4" 6" 8" 12" 18"	- MACHINED W - WELDED (12" and up only)

EXAMPLE: T1 1/2 P 4  
4" 304 STAINLESS THERMOWELL  
WITH 1/2" NPT PROCESS THREAD

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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