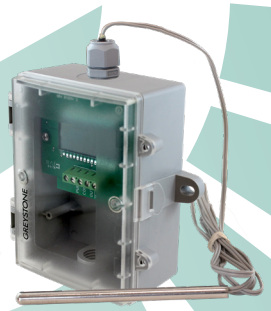
GREYSTONE ENERGY SYSTEMS INC

HIGH ACCURACY REMOTE PROBE STRAP-ON TEMPERATURE TRANSMITTER with LCD
HATDRP Series

The high accuracy single point strap-on temperature transmitter incorporates a precision platinum RTD encapsulated in a 6 mm (0.236") OD, 304 stainless steel probe and is available in various lengths (see ordering chart). All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response for measurement of pipe temperatures. A weatherproof Polycarbonate enclosure is incuded for ease of installation. An LCD is provided in either °C or °F.



SPECIFICATIONS:

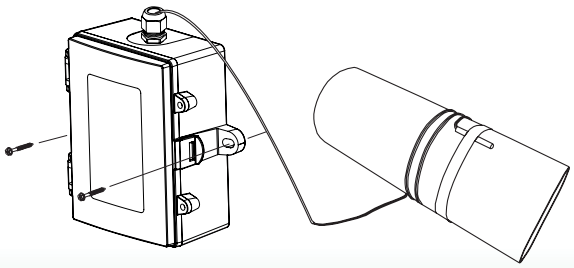
Sensor Type:	1000 ohm platinum RTD
Sensor Accuracy:	**RTD Class A:** ±0.15°C @ 0°C **RTD 1/3 DIN:** ±0.1°C @ 0°C **RTD 1/10 DIN:** ±0.03°C @ 0°C
Probe Sensing Range:	-20 to 105°C (-4 to 221°F)
Wire Material:	PVC insulated, parallel bonded, 22 AWG
Wire Length:	1.524 m (5')
Probe Material:	304 Series Stainless Steel
Probe Diameter:	6 mm (0.236")
Standard Lengths:	50, 100, 150, 200, 300, 450 mm (2", 4", 6", 8", 12", 18")
Output Signal:	4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured)
Transmitter Accuracy:	± 0.2% of span, including linearity
Power Supply:	15 to 30 Vdc, 12 to 28 Vac
Consumption (max):	20 mA for current, 11 mA for voltage
Protection Circuitry:	Reverse voltage protected and output limited
Ouput Drive @ 24 Vdc:	700 ohms max for current output, 20K ohms min for voltage output
LCD Display Units:	°C or °F (factory configured)
Display Range:	3 digit for -88.8 to 888 as required
Display Size:	38.1mm W x 16.5 mm H (1.5" to 0.65")
Digit Height:	11.4 mm (0.45") plus °C/°F symbol
Ambient Operating Range:	0 to 50°C (32 to 122°F), 0-95 %RH non-condensing
Enclosure:	Grey polycarbonate, UL94-V0, IP65 (NEMA 4X) F style includes thread adapter (1/2" NPT to M16) and cable gland fitting
Wiring Connections:	Screw terminal block (14 to 22 AWG)
Country of Origin:	Canada

TYPICAL INSTALLATION:

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

For best results, thermal conductive compound should be applied to pipe prior to mounting the probe.

Find a suitable location along the pipe where both the probe and remote enclosure can be mounted. If necessary, remove a section of insulation from pipe. Position probe directly on the pipe and secure using a pipe clamp. For added security, make 1 to 3 loops of the sensor cable around the pipe and feed through wire hole on the enclosure and secure using the supplied grommet. If applicable, the pipe insulation can be re-applied to the pipe over the probe.



PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
HATDRP	High Accuracy Remote Probe Strap-on Temperature Transmitter with Display

CODE	Enclosure
B	Polycarbonate, with hinged & gasketed cover
F	Same as B, with thread adapter & cable gland fitting

CODE	Display Units
C	Celsius
F	Fahrenheit

CODE	Sensor
18	1000 Ω, Platinum, wire 2, IEC 751, 385 Alpha, thin film, Class A
48	1000 Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, 1/3 DIN
22	1000 Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, 1/10 DIN

CODE	Cable Length
A	50 mm (2)
B	100 mm (4")
C	150 mm (6")
D	200 mm (8")

CODE	Output
A	4-20 mA 2 or 3 wire
D	0-5 Vdc 3 wire
E	0-10 Vdc 3 wire

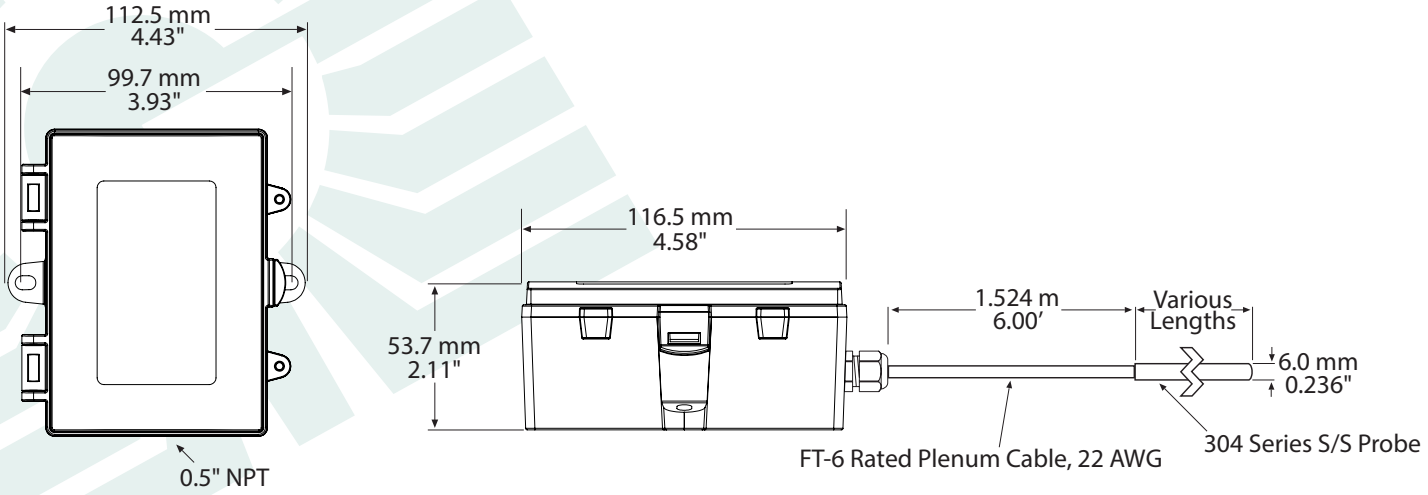
CODE	Scaled Range
001	0 to 35°C (32 to 95°F)
002	0 to 50°C (32 to 122°F)

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

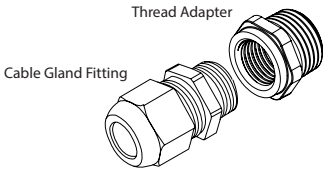
Wiring:

Terminal	Function
PWR	Power Supply
COM	Power Supply Common
TEMP (2)	Temperature Sensor Input
NO	Relay Output - Normally Open Contact
COM	Relay Common
NC	Relay Output - Normally Closed Contact

DIMENSIONS:



Included with F style enclosure



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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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