

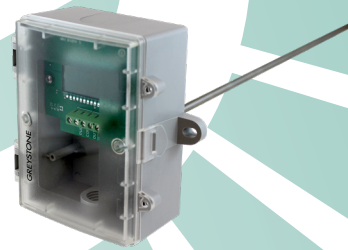


# GREYSTONE

ENERGY SYSTEMS INC

## HIGH ACCURACY RIGID DUCT AVERAGE TEMPERATURE TRANSMITTER with LCD HATDDR Series

The high accuracy multi-point rigid duct average temperature transmitter incorporates four precision platinum RTD's 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 is available with various ranges. A weatherproof Polycarbonate enclosure is included for ease of installation. An LCD is provided in either °C or °F (see ordering chart).



### 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 60°C (-4 to 140°F)  
 Wire Material:.....PVC insulated, 22 AWG  
 Probe Material:.....304 Series stainless steel  
 Probe Diameter:.....6 mm (0.236")  
 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):.....22.5 mA (on open sensor)  
 Input Voltage Effect:.....Negligible over specified operating range  
 Protection Circuitry:.....Reverse voltage protected and output limited  
 LCD Display Units:.....°C or °F (factory configured)  
 Display Range:.....3 digit for -88.8 to 888 as required  
 Display Size:.....38.1 mm 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  
 Enclosure:.....Grey polycarbonate UL94-V0, IP65 (NEMA 4X)  
   F style includes thread adapter (1/2" NPT to M16)  
   and cable gland fitting

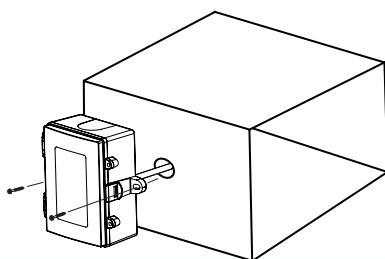
Wiring Connections:.....Screw terminal block (14 to 22 AWG)  
 Country of Origin:.....Canada

### TYPICAL INSTALLATION:

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

The duct type probes are installed through a hole in the side of the duct to monitor a single point temperature within the duct. Since the probes are tip sensitive, select a probe length that places the sensor well into the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

The enclosure provides mounting tabs for ease of installation.



### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
HATDDR	High Accuracy Rigid Duct Average 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	Probe Length
F	450 mm (18")
G	600 mm (24")
H	900 mm (36")

CODE	Adjustable Setpoint Range
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:

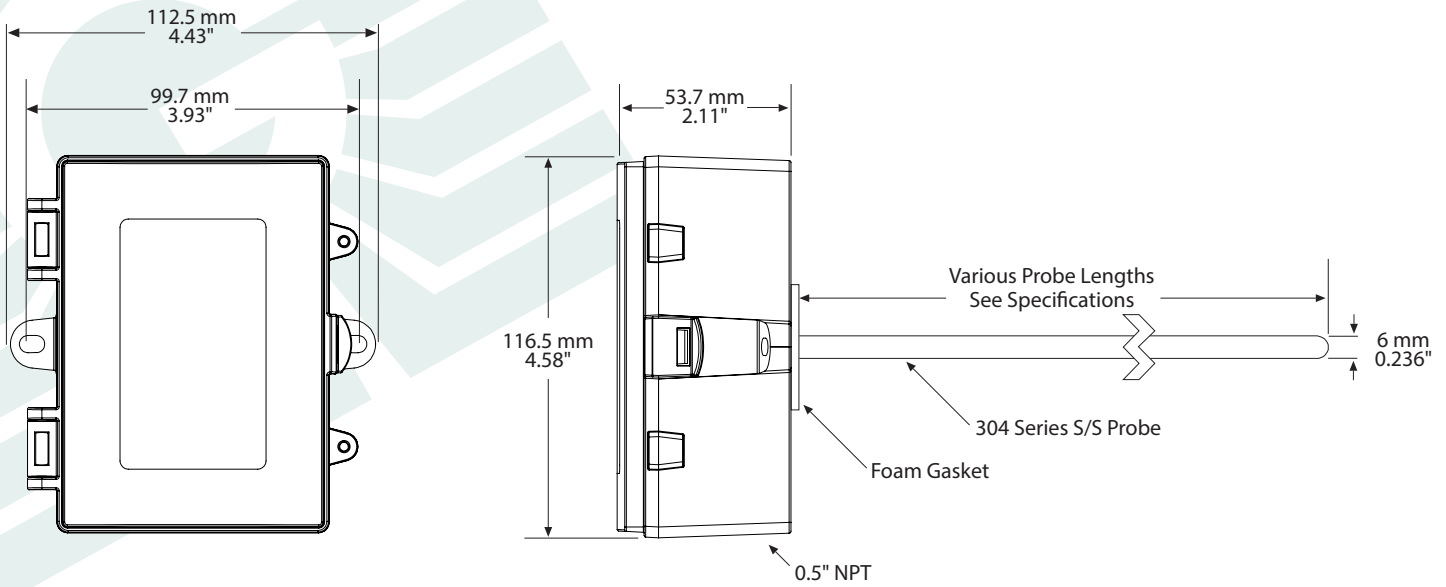
**Terminal**  
 PWR  
 COM  
 TEMP (2)

**Function**  
 Power Supply  
 Power Supply Common  
 Temperature Sensor Input

NO  
 COM  
 NC

Relay Output - Normally Open Contact  
 Relay Common  
 Relay Output - Normally Closed Contact

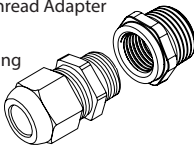
## DIMENSIONS:



Included with F style enclosure

Thread Adapter

Cable Gland Fitting



# GREYSTONE

**ENERGY SYSTEMS INC**

Greystone Energy Systems, Inc.

150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7

(506) 853-3057 Fax: (506) 853-6014

North America: 1-800-561-5611

e-mail: mail@greystoneenergy.com

www.greystoneenergy.com

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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