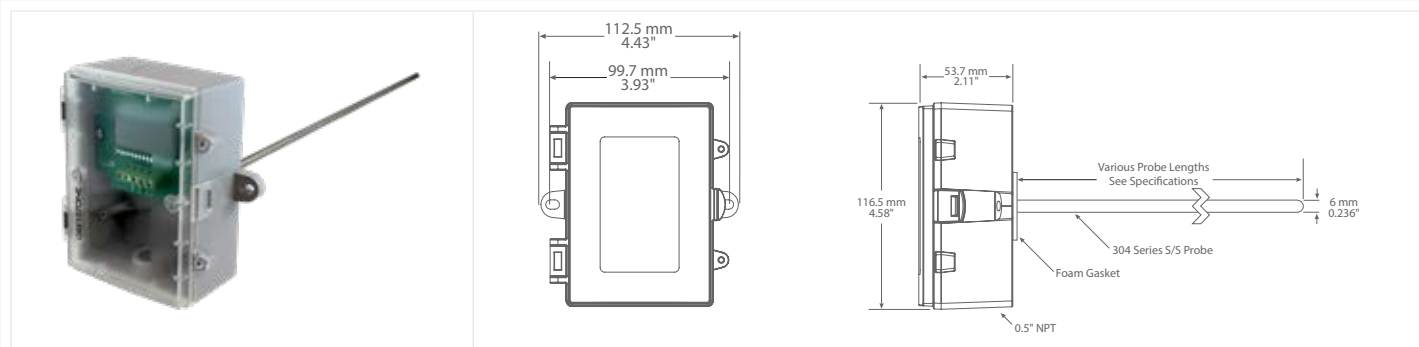


## RIGID DUCT AVERAGE TEMPERATURE TRANSMITTER WITH LCD



### TDDR SERIES

### PRODUCT DESCRIPTION

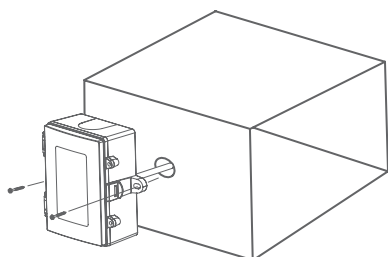
The multi-point rigid duct average temperature transmitter incorporates four precision platinum RTD's encapsulated in a 6 mm (0.236") OD, 304 stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is available with various ranges. A hinged and gasketed Polycarbonate enclosure is included for ease of installation. An LCD is provided in either °C or °F.

### 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.

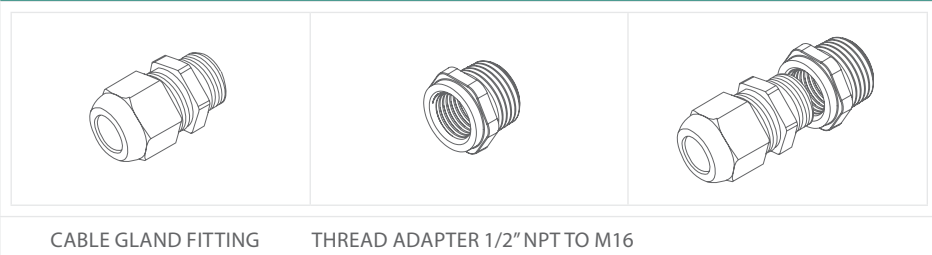
The enclosure provides mounting tabs for ease of installation.



### SPECIFICATIONS

SENSOR TYPE	1000 Ω platinum RTD
SENSOR ACCURACY	±0.3°C (±0.54°F) @ 0°C (32°F)
PROBE SENSING RANGE	-40 to 60°C (-40 to 140°F)
PROBE DIAMETER	6mm (0.236")
PROBE MATERIAL	304 series stainless steel
STANDARD LENGTHS	450, 600, 900 mm (18", 24", 36")
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	15-30 Vdc or 12-28 Vac
MAXIMUM LOOP CURRENT	20 mA
MINIMUM LOOP CURRENT	4 mA
MAXIMUM LOOP LOAD	700Ω
MAXIMUM CURRENT (VOLTAGE)	11 mA
MAXIMUM OUTPUT (VOLTAGE)	10 Vdc
CONSUMPTION (MAX)	<b>Current:</b> 20 mA <b>Voltage:</b> 11 mA
INPUT VOLTAGE EFFECT	Negligible over specified operating range
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
OUTPUT DRIVE @ 24 VDC	<b>Current:</b> 700Ω max <b>Voltage:</b> 20,000Ω min
LCD DISPLAY UNITS	°C or °F (factory configured)
DISPLAY RANGE	3 digit Negative to Positive Range (-88 to 88) Positive Range <100 (88.8), >100 (888)
DISPLAY SIZE	38.1mm W x 16.5mm H (1.5" x 0.65")
DIGIT HEIGHT	11.4mm (0.45") plus °C/°F symbol
AMBIENT OPERATING RANGE	0 to 50°C (32 to 122°F), 5 to 95 %RH
ENCLOSURE	<b>B:</b> Grey polycarbonate UL94-V0, IP65 (NEMA 4X) <b>F:</b> Same as B with thread adapter (1/2" NPT to M16) and cable gland fitting
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
COUNTRY OF ORIGIN	Canada

### ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION

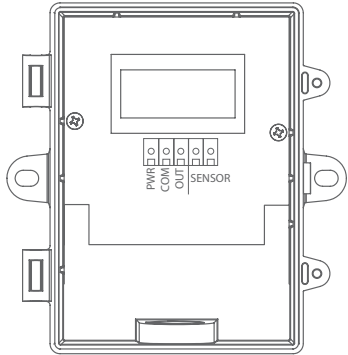


CABLE GLAND FITTING

THREAD ADAPTER 1/2" NPT TO M16



## WIRING INFORMATION



### TERMINAL

PWR  
COM  
OUT

SENSOR  
SENSOR

### FUNCTION

Power Supply  
Power Supply Common  
Analog Output

Temperature Sensor Input  
Temperature Sensor Input

## ORDERING

PRODUCT	<b>TDDR</b>	Rigid duct average temperature Transmitter with Display
ENCLOSURE	<b>B</b> <b>F</b>	Polycarbonate, with hinged and gasketed cover Same as B, with thread adapter and cable gland fitting
DISPLAY UNITS	<b>C</b> <b>F</b>	Celsius Fahrenheit
SENSOR	<b>12</b>	1000Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, Class B
PROBE LENGTH	<b>F</b> <b>G</b> <b>H</b>	450mm (18") 600mm (24") 900mm (36")
OUTPUT	<b>A</b> <b>D</b> <b>E</b>	4-20 mA, 2 or 3 wire 0-5 Vdc, 3 wire 0-10 Vdc, 3 wire
SCALED RANGE	<b>001</b> <b>002</b>	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F)

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

## PART NUMBER

<b>TDDR</b>