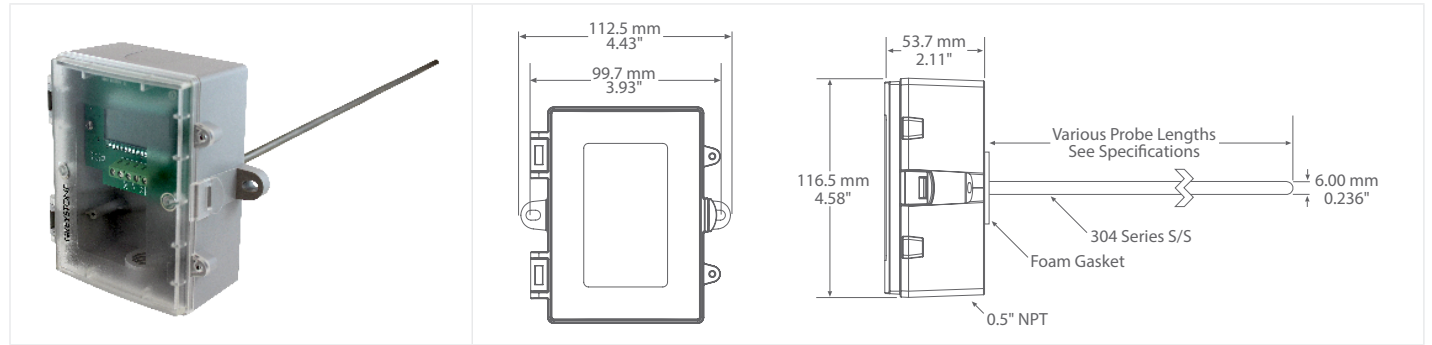




ALL PURPOSE TEMPERATURE TRANSMITTER WITH LCD



TDAP SERIES

PRODUCT DESCRIPTION

The TDAP series incorporates a precision platinum RTD 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. The transmitter provides a high accuracy signal with excellent long term stability, low hysteresis and fast response. It is available with various scaled ranges. A hinged and gasketed Polycarbonate enclosure is included, and 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.

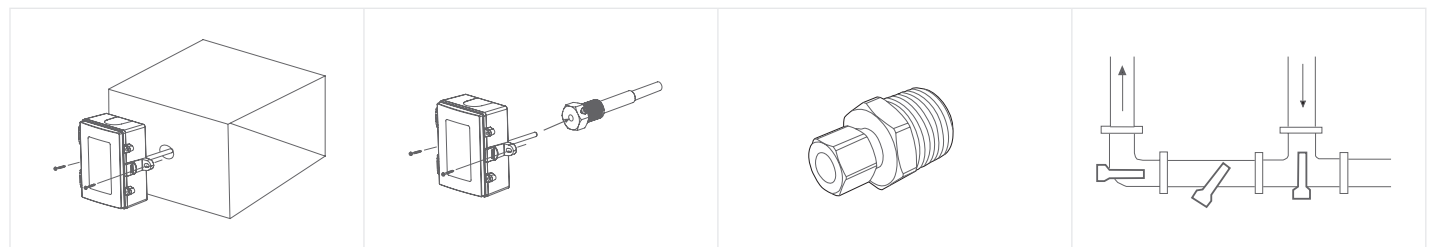
The enclosure provides mounting tabs for ease of installation.

NOTE: For immersion applications, a T2 series thermowell is required. When using a T1 series thermowell an adapter will be required.

SPECIFICATIONS

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|-------------------------|---|
| SENSOR TYPE | 1000 Ω platinum RTD |
| SENSOR ACCURACY | $\pm 0.3^{\circ}\text{C}$ ($\pm 0.54^{\circ}\text{F}$) @ 0°C (32°F) |
| PROBE SENSING RANGE | -40 to 100°C (-40 to 212°F) |
| WIRE MATERIAL | PVC insulated, parallel bonded, 22 AWG |
| PROBE MATERIAL | 304 series stainless steel |
| PROBE DIAMETER | 6 mm (0.236") |
| STANDARD LENGTHS | 50, 100, 150, 200, 300, and 400 mm (2", 4", 6", 8", 12", and 18") |
| MAXIMUM LOOP CURRENT | 20 mA |
| OUTPUT SIGNAL | 4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured) |
| TRANSMITTER ACCURACY | $\pm 0.2\%$ of span, including linearity |
| POWER SUPPLY | 15-30 Vdc or 12-28 Vac |
| CONSUMPTION (MAX) | Current: 20 mA Voltage: 11 mA |
| INPUT VOLTAGE EFFECT | Negligible over specified operating range |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| OUTPUT DRIVE @ 24 VDC | Current: 700 Ω max Voltage: 20,000 Ω min |
| LCD DISPLAY UNITS | $^{\circ}\text{C}$ or $^{\circ}\text{F}$ (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" x 0.65") |
| DIGIT HEIGHT | 11.4 mm (0.45") plus $^{\circ}\text{C}/^{\circ}\text{F}$ symbol |
| AMBIENT OPERATING RANGE | 0 to 50°C (32 to 122°F), 5 to 95 %RH |
| ENCLOSURE | B: Grey polycarbonate UL94-V0, IP65 (NEMA 4X) F: 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 |

MOUNTING STYLES



DUCT MOUNTING

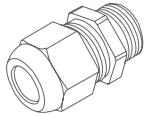
THERMOWELL MOUNTING

T1-AP THERMOWELL ADAPTER

THERMOWELL PLACEMENT



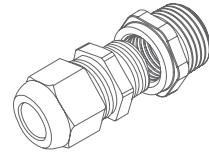
ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



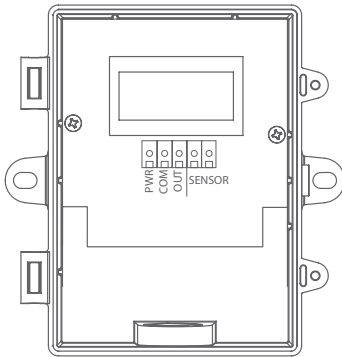
CABLE GLAND FITTING



THREAD ADAPTER 1/2" NPT TO M16



WIRING INFORMATION



TERMINAL

PWR
COM
OUT

SENSOR
SENSOR

FUNCTION

+ 24 Vdc/ac power supply
Common
Analog Output

Temperature sensor input
Temperature sensor input

ORDERING

| | | |
|---------------|----------------------------|---|
| PRODUCT | TDAP | All purpose duct/immersion temperature Transmitter with Display |
| ENCLOSURE | B F | Polycarbonate, with hinged and gasketed cover Same as B, with thread adapter (1/2" NPT to M16) and cable gland fitting |
| DISPLAY UNITS | C F | Celsius Fahrenheit |
| SENSOR | 12 | 1000Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, Class B |
| PROBE LENGTH | A B C D E F | 50mm (2") 100mm (4") 150mm (6") 200mm (8") 300mm (12") 450mm (18") |
| OUTPUT | A D E | 4-20 mA, 2 or 3 wire 0-5 Vdc, 3 wire 0-10 Vdc, 3 wire |
| SCALED RANGE | 001 002 003 09E | 0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) 0 to 100°C (32 to 212°F) -10 to 60°C (14 to 140°F) |

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

PART NUMBER

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| TDAP |
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