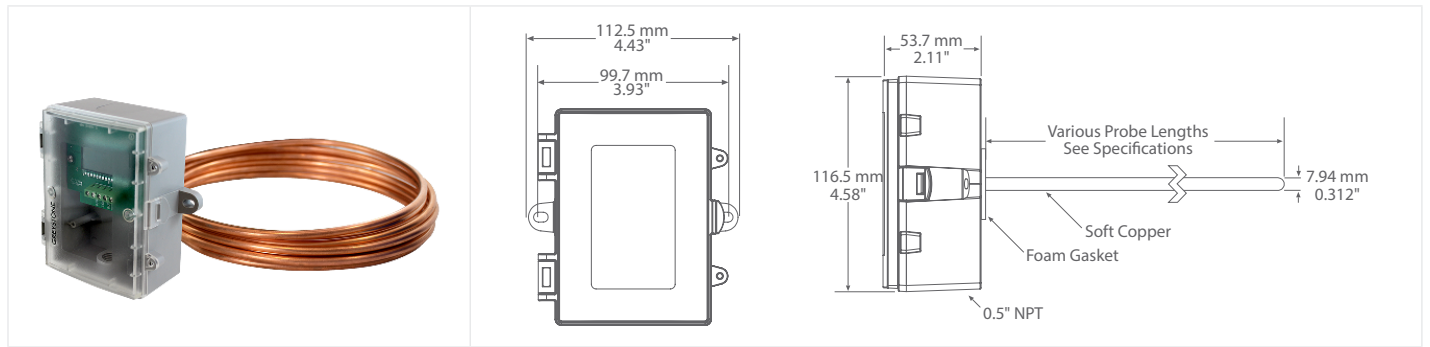




HIGH ACCURACY FLEXIBLE COPPER DUCT AVERAGE TEMPERATURE TRANSMITTER WITH LCD



HATDDC SERIES

PRODUCT DESCRIPTION

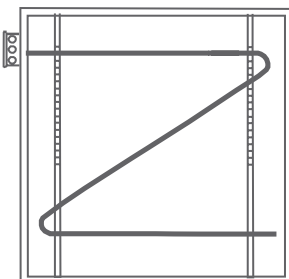
The high accuracy duct averaging temperature transmitter incorporates numerous precision platinum RTD's encapsulated in a 7.94 mm (0.3125") OD, soft copper probe and is available in various lengths (see ordering chart). All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response for measurement of duct temperatures. A weatherproof 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 average probes are installed through a hole in the side of the duct to monitor an average temperature within the duct. Select a probe length that allows for criss-crossing the duct multiple times. Install the probes in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification elements.

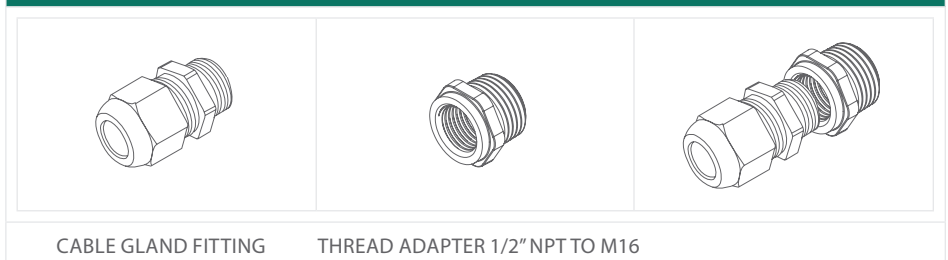
The enclosure provides mounting tabs for ease of installation.



SPECIFICATIONS

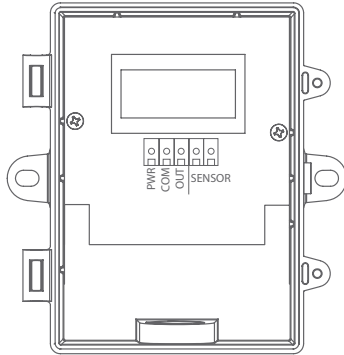
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|-------------------------|---|
| SENSOR TYPE | 1000Ω Platinum, IEC 751, 385 Alpha, thin film |
| SENSOR ACCURACY | RTD Class A: ±0.15°C (±0.27°F) @ 0°C (32°F) RTD 1/3 DIN: ±0.1°C (±0.18°F) @ 0°C (32°F) RTD 1/10 DIN: ±0.03°C (±0.054°F) @ 0°C (32°F) |
| PROBE SENSING RANGE | -20 to 60°C (-4 to 140°F) |
| WIRE MATERIAL | FT-6 rated plenum cable, 22 AWG |
| PROBE MATERIAL | Soft copper |
| PROBE DIAMETER | 7.94 mm (0.312") |
| STANDARD LENGTHS | 1800mm, 3600mm, 6100mm, 7300mm (6', 12', 20', 24') |
| 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 |
| CONSUMPTION (MAX) | Current: 20 mA Voltage: 11 mA |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| OUTPUT DRIVE @ 24 VDC | Current: 700Ω max Voltage: 20,000Ω min |
| 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 16.5mm 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), 0 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 |

OPTIONAL ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION



CABLE GLAND FITTING

THREAD ADAPTER 1/2" NPT TO M16


WIRING INFORMATION


| TERMINAL | FUNCTION |
|----------|--------------------------|
| PWR | + 24 Vdc/ac power supply |
| COM | Common |
| OUT | Analog Output |
| SEN | Negative |
| SEN | Excitation |

ORDERING
PART NUMBER

| PRODUCT | HATDDC | High Accuracy Copper Duct Average Temperature Transmitter with Display |
|---------------|--|--|
| ENCLOSURE | B F | Polycarbonate, with hinged and gasketed cover Same as B, with thread adapter and cable gland fitting |
| DISPLAY UNITS | C F | Celsius Fahrenheit |
| SENSOR | 18 48 22 | 1000Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, Class A 1000Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film 1/3 DIN 1000Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film 1/10 DIN |
| PROBE LENGTH | I J K L | 1800mm (6') 3600mm (12') 6100mm (20') 7300mm (24') |
| 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 | 0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) |

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