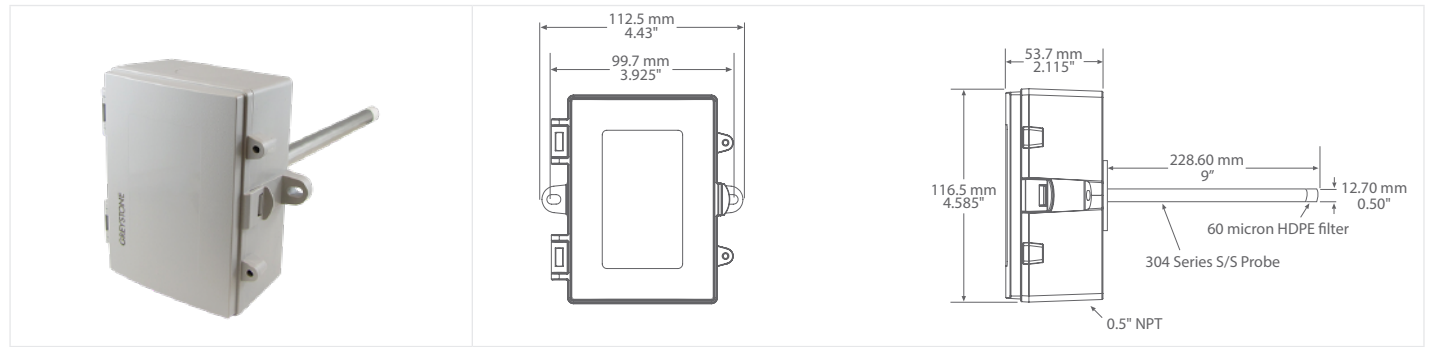




HIGH ACCURACY DUCT HUMIDITY/TEMPERATURE TRANSMITTER



HAHTDT SERIES

PRODUCT DESCRIPTION

The high accuracy duct humidity/temperature transmitter series uses a highly accurate and reliable Thermostat Polymer based capacitance humidity sensor and Platinum RTD temperature sensor together with state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensors are encapsulated in a 228.60 mm (9") long by 12.7 mm (0.5") diameter S/S probe. A 60 micron HDPE filter protects the sensor for contaminants. A hinged and gasketed Polycarbonate enclosure is provided for ease of installation.

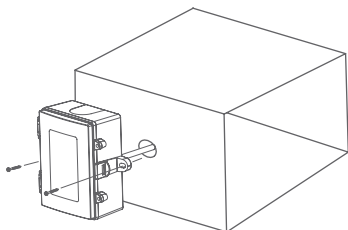
TYPICAL INSTALLATION

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 single point humidity within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Mounting tabs are on the outside of the enclosure for ease of installation.

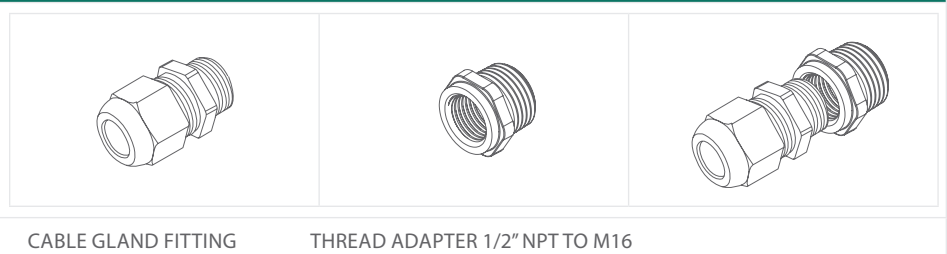
A terminal block connection is provided for connection to the Building Automation System.



SPECIFICATIONS

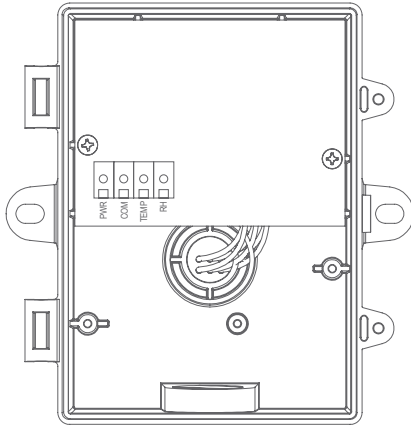
HUMIDITY SENSOR TYPE	Thermostat polymer based capacitance
HUMIDITY SENSOR ACCURACY	±1% (20 to 80 %RH) or ±2% (5 to 95 %RH)
SENSOR RESPONSE TIME	15 seconds typical
MEASUREMENT RANGE	0 to 100 %RH
HYSTERESIS	±1.5 %RH maximum
REPEATABILITY	±0.5 %RH typical
LINEARITY	±0.5 %RH typical
STABILITY	±1 %RH typical at 50 %RH in 5 years
TEMPERATURE SENSOR TYPE	1000Ω Platinum, IEC 751, 385 Alpha, thin film 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)
TEMPERATURE ACCURACY	±0.1% of span
AMBIENT OPERATING RANGE	-40 to 50°C (-40 to 122°F), 0 to 95 %RH non-condensing
POWER SUPPLY	18 to 30 Vdc, 15 to 26 Vac
CONSUMPTION	22 mA maximum
INPUT VOLTAGE EFFECT	Negligible over specified operating range
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
OUTPUT SIGNAL	4-20 mA, 0-5 Vdc, or 0-10 Vdc
OUTPUT DRIVE @ 24 VDC	Current: 550Ω max Voltage: 10,000Ω min
INTERNAL ADJUSTMENTS	Clearly marked ZERO and SPAN pots
ENCLOSURE	B: Grey Polycarbonate, UL94-V0, IP65 (NEMA 4X) F: Same as B, with thread adapter (1/2" NPT to M15) and cable gland fitting
PROBE	230mm (9") length x 12.7mm (1/2") diameter s/s with porous filter
TERMINATION	Screw terminal block (14 to 22 AWG)
COUNTRY OF ORIGIN	Canada

ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION





WIRING INFORMATION



TERMINAL	FUNCTION
PWR	24 Vac/dc of controller or power supply To GND or COMMON of controller
COM	
TEMP	Analog Output
RH	

ORDERING

PRODUCT	HAHTDT	High Accuracy Duct Humidity/Temperature Transmitter
ENCLOSURE	B F	Polycarbonate with hinged and gasketed cover Same as B, with thread adapter and cable gland fitting
RH ACCURACY	1 2	1% 2%
TEMPERATURE SENSOR	18 48 22	1000Ω Platinum, IEC 751, 385 Alpha, thin film, Class A 1000Ω Platinum, IEC 751, 385 Alpha, thin film, 1/3 DIN 1000Ω Platinum, IEC 751, 385 Alpha, thin film, 1/10 DIN
OUTPUT SIGNALS (RH AND TEMPERATURE)	A D E	4-20 mA 0-5 Vdc 0-10 Vdc
TEMPERATURE SPAN	001 002 006	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) -50 to 50°C (-58 to 122°F)

PART NUMBER

HAHTDT

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