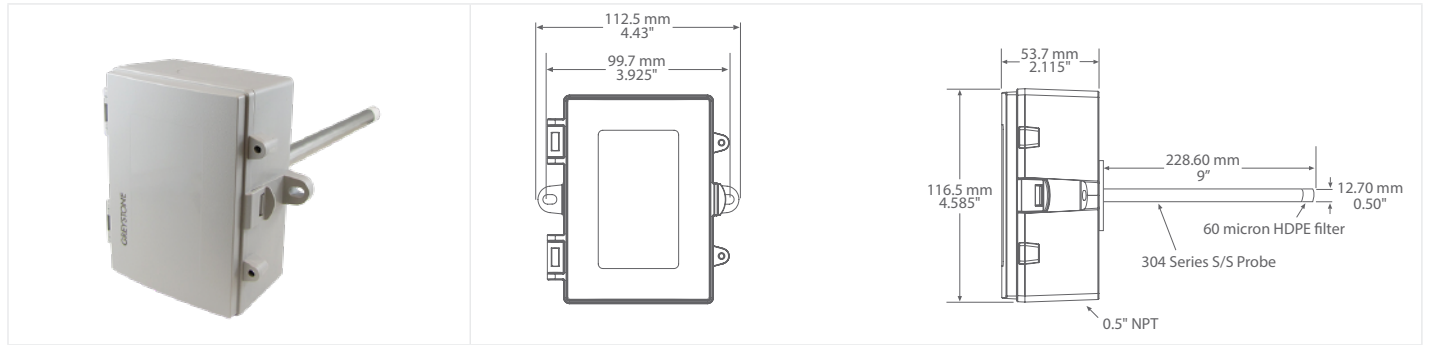




## DUCT HUMIDITY/TEMPERATURE TRANSMITTER



### HTDT SERIES

### PRODUCT DESCRIPTION

The duct temperature and humidity transmitter series uses a highly accurate and reliable Thermoset 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 weatherproof Polycarbonate enclosure is provided for ease of installation.

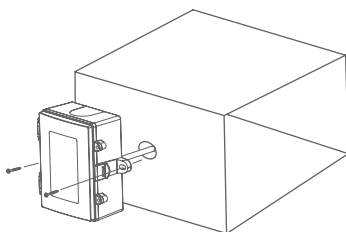
### TYPICAL INSTALLATION

**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 a 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 on the outside of the enclosure for ease of installation.

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



### SPECIFICATIONS

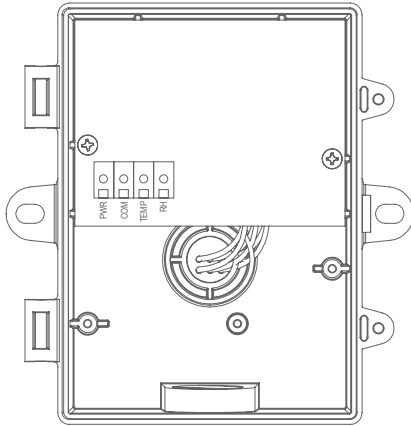
HUMIDITY SENSOR TYPE	Thermoset polymer based capacitive
TEMPERATURE SENSOR TYPE	1000Ω Platinum, IEC 751, 385 Alpha, thin film
HUMIDITY SENSOR ACCURACY	±2, 3, or 5 %RH (5 to 95 %RH)
TEMPERATURE SENSOR ACCURACY	±0.1% of span
SENSOR RESPONSE TIME	15 seconds typical
MEASUREMENT RANGE	0 to 100 %RH
HYSTERESIS	±1.5 %RH maximum
REPEATABILITY	±0.5 %RH typical
LINEARITY	±0.5 %RH typical
OPERATING TEMPERATURE	-40 to 50°C (-40 to 122°F)
OPERATING HUMIDITY	0 to 95 %RH non-condensing
POWER SUPPLY	18 to 35 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 current loop, 0-5 Vdc or 0-10 Vdc (factory configured)
OUTPUT DRIVE @ 24 VDC	<b>Current:</b> 550Ω max <b>Voltage:</b> 10,000Ω min
INTERNAL ADJUSTMENTS	Clearly marked ZERO and SPAN pots
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
PROBE	230mm (9") length x 12.7mm (1/2") diameter s/s with porous filter
TERMINATION	Screw terminal block (14 to 22 AWG)
WEIGHT	220g (7.8 oz) including probe
COUNTRY OF ORIGIN	Canada

### ACCESSORIES - INCLUDED WITH F STYLE ENCLOSURE





## WIRING INFORMATION



TERMINAL	FUNCTION
PWR	+24 Vac/dc
COM	Common
TEMP	Analog Output
RH	Analog Output

## ORDERING

PRODUCT	HTDT	Duct Humidity/Temperature Transmitter
ENCLOSURE	<b>B</b>	Polycarbonate with hinged and gasketed cover
	<b>F</b>	Same as B, with thread adapter and cable gland fitting
RH ACCURACY	<b>2</b>	2%
	<b>3</b>	3%
	<b>5</b>	5%
TEMPERATURE SENSOR	<b>12</b>	1000Ω Platinum, IEC 751, 385 Alpha, thin film
OUTPUT SIGNALS (RH AND TEMPERATURE)	<b>A</b>	4-20 mA
	<b>D</b>	0-5 Vdc
	<b>E</b>	0-10 Vdc
TEMPERATURE SPAN	<b>001</b>	0 to 35°C (32 to 95°F)
	<b>002</b>	0 to 50°C (32 to 122°F)
	<b>006</b>	-50 to 50°C (-58 to 122°F)

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

## PART NUMBER

HTDT