

# **DUCT TEMPERATURE** / **HUMIDITY TRANSMITTER HTDT Series**

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-ofthe-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.

### **SPECIFICATIONS:**

Humidity Sensor TypeThermoset Polymer based capacitive
Accuracy±2, 3, or 5% RH, (5% to 95% RH)
Measurement Range0 to 100% RH
Hysteresis±1.5% RH maximum
Repeatability±0.5% RH typical
Linearity±0.5% RH typical
Sensor Response Time 15 seconds typical
Stability±1% RH typical at 50% RH in 5 yrs.
Temperature Sensor Type 1000Ω Platinum, IEC 751,
385 Alpha, thin film
Sensor Accuracy±0.1% of span
Operating Temperature40° to 85°C (-40° to 185°F)
Operating Humidity0 to 95% RH non-condensing
Power Supply18 to 35 Vdc, 15 to 26 Vac
Consumption22 mA maximum
Input Voltage EffectNegligible over specified operating range
Protection CircuitryReverse voltage protected & output limited
Output Signals4-20 mA, 0-5 or 0-10 Vdc
Output Drive at 24 VdcCurrent: 550 ohms max
Voltage: 10K ohms min
Internal Adjustments Clearly marked ZERO and SPAN pots
Wiring ConnectionsScrew terminal block (14 to 22 AWG)
Enclosures Polycarbonate, UL94-V0, IP65 (NEMA 4X)
F style includes thread adapter (1/2" NPT to M16)
and cable gland fitting
117 W x 102 H x 53 D mm (4.6" x 4.0" x 2.1")
Probe
diameter stainless steel with porous filter
Weight220g (7.8 oz) including Probe.
Country of OriginCanada

#### 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.

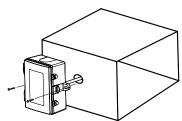


#### **PART NUMBER SELECTED**

# **PRODUCT SELECTION INFORMATION:**

MODEL		Product Description									
нт	DT	Duc	Duct - Humidity/Temperature Transmitter Series								
		CODE Enclosure									
		B F		Polycarbonate with hinged and gasketed cover Same as B, with thread adapter & cable gland fitting							
				СО	CODE RH Accuracy						
				3	2 2 % 3 3 % 5 5 %						
	CODE Temp Sensor										
						1	2 1000 Ω Platinum, IEC 751, 385 Alpha, thin film				
								CODE	Outpu	Output Signals (RH and Temp)	
					A D E		4 - 20 mA 0 - 5 Vdc 0 - 10 Vdc				
									CODE	Temperature Span	
									001 002 003 006	0°C - 35°C (32°F - 95°F) 0°C - 50°C (32°F - 122°F) 0°C - 100°C (32°F - 212°F) -50°C - 50°C (-58°F - 122°F)	
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Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.





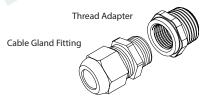








## Included with F style enclosure





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Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leadingedge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our

Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

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