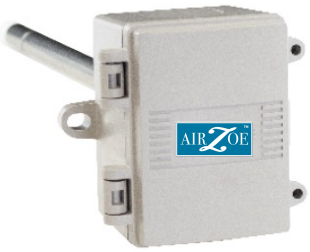
AZ-HSDT

DUCT HUMIDITY TRANSMITTER



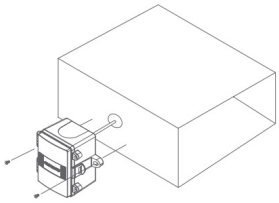
DESCRIPTION

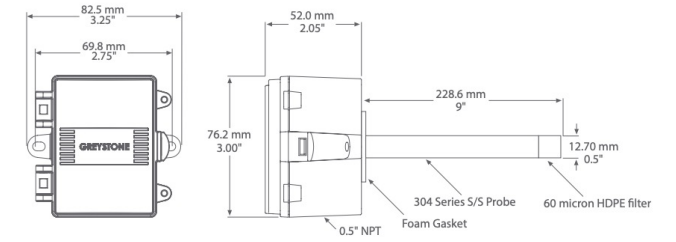
The duct humidity transmitter uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and state-of the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensor is encapsulated in a 230 mm (9") long by 12.7 mm (0.5") diameter 304 S/S probe and is field replaceable. A 60 micron HDPE filter protects the sensor for contaminants. An optional integrated temperature sensor is available.

TYPICAL INSTALLATION

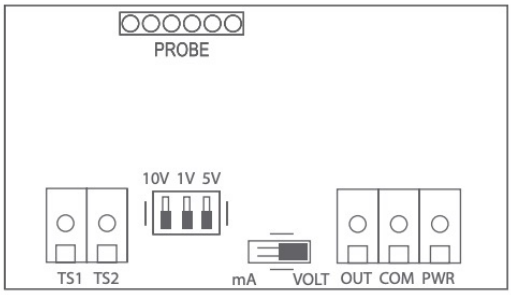
For complete installation and wiring details, please refer to the product installation instructions.

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.





WIRING INFORMATION



TERMINAL	FUNCTION
PWR	24 Vac/dc of controller or power supply
COM	COM GND or COMMON
OUT	Analog Output
TS1	Resistance Output
TS2	Resistance Output

SPECIFICATIONS	
SENSOR	Thermoset polymer based capacitive
SENSOR ACCURACY	±2, 3, or 5 %RH (5 to 95 %RH)
MEASUREMENT RANGE	0 to 100 %RH non-condensing
RESOLUTION	±0.01 %RH
HYSTERESIS	±0.8 %RH @ 25°C (77°F)
RESPONSE TIME	8 seconds
STABILITY	<0.25% RH/year
AMBIENT OPERATING RANGE	-40 to 50°C (-4 to 122°F)
POWER SUPPLY	24 Vac/dc ~ ±10% typical
CONSUMPTION	22 mA maximum @24Vdc, 70mA @24Vac
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc, 0-10 Vdc, or 0-1 Vdc (field selectable)
OUTPUT DRIVE @ 24 VDC	Current: 550 Ω maximum Voltage: 10 KΩ minimum
OPTIONAL TEMPERATURE SENSOR	Various RTD's and thermistors available as 2 wire resistance output
ENCLOSURE	A: ABS, UL94-V0, IP65 (NEMA 4X) E: Same as A, 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)
COUNTRY OF ORIGIN	Canada

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516-256-3131

D-VAC Sales Inc.
HVAC Manufacturer's Representive

AZ-HSDT

DUCT HUMIDITY TRANSMITTER

ORDERING			PART NUMBER
PRODUCT	HRC	Room Humidity Transmitter	**HSDT**
ENCLOSURE	A E	ABS with hinged and gasketed cover Same as A, with thread adapter and cable gland fitting	
RH ACCURACY	2 3 5	2% 3% 5%	
OPTIONAL TEMPERATURE SENSOR	00 02 05 06 06 08 12 13 14 20 24 59	No Temperature Sensor Option 100Ω Platinum, IEC 751, 385 Alpha, thin film, 3 wire 1801Ω NTC Thermistor, ±0.2°C 3000Ω NTC Thermistor, ±0.2°C 10,000Ω Type 3, NTC Thermistor, ±0.2°C 2.252KΩ NTC Thermistor, ±0.2°C 1000Ω Platinum, IEC 751, 385 Alpha, thin film 1000Ω Nickel, Class B, DIN 43760 10,000Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor 20,000Ω NTC Thermistor, ±0.2°C 10,000Ω Type 2, NTC Thermistor, ±0.2°C 10,000Ω 25°C, ±%, B = 3435 ±1% (25/85)	

ORDERING – REPLACEMENT SENSOR MODULE			PART NUMBER
PRODUCT	HRMPB	B Replacement Humidity Sensor Module - Probe	**HRMPB**
RH ACCURACY	2 3 5	2% 3% 5%	
OPTIONAL TEMPERATURE SENSOR	00 02 05 06 06 08 12 13 14 20 24 59	No Temperature Sensor Option 100Ω Platinum, IEC 751, 385 Alpha, thin film, 3 wire 1801Ω NTC Thermistor, ±0.2°C 3000Ω NTC Thermistor, ±0.2°C 10,000Ω Type 3, NTC Thermistor, ±0.2°C 2.252KΩ NTC Thermistor, ±0.2°C 1000Ω Platinum, IEC 751, 385 Alpha, thin film 1000Ω Nickel, Class B, DIN 43760 10,000Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor 20,000Ω NTC Thermistor, ±0.2°C 10,000Ω Type 2, NTC Thermistor, ±0.2°C 10,000Ω 25°C, ±%, B = 3435 ±1% (25/85)	

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