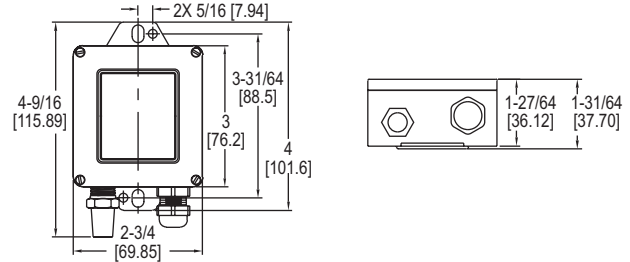


# WEATHER-RESISTANT HUMIDITY/TEMPERATURE TRANSMITTER

Compact Housing, Sintered Filter



The compact **Series WHT Weather-Resistant Humidity/Temperature Transmitter** is designed to withstand the elements. A removable sintered filter protects the polymer capacitance sensor from solid objects that may come in contact with the transmitter. The transmitter is available with 4 to 20 mA or 0 to 10 VDC output signals for both temperature and humidity. This transmitter is ideal for measuring outside air temperature and humidity levels for air handling economizer applications.

**FEATURES/BENEFITS**

- RH or RH and temperature outputs
- Compact NEMA 3S construction

**APPLICATIONS**

- Air handling economizers
- Air environment monitoring in agriculture or livestock cultivation houses

MODEL CHART			
Model	Accuracy	RH Output	Temperature
WHT-310	3%	4 to 20 mA	None
WHT-311	3%	4 to 20 mA	4 to 20 mA
WHT-320	3%	0 to 10 VDC	None
WHT-322	3%	0 to 10 VDC	0 to 10 VDC
WHT-330	3%	0 to 5 VDC	None
WHT-333	3%	0 to 5 VDC	0 to 5 VDC
WHT-31A	3%	4 to 20 mA	10K Ω Type III
WHT-32A	3%	0 to 10 VDC	10K Ω Type III

**Note:** For 2% accuracy, change the leading 3 to a 2.  
**Example:** WHT-210.

**SPECIFICATIONS**

**Relative Humidity Range:** 0 to 100% RH.

**Temperature Range:** -40 to 140°F (-40 to 60°C).

**Accuracy, RH:** ±3% 20 to 80% RH, ±4% @ 10-20%, 80 to 90%.

**Accuracy, Temp Models with 4 to 20 mA Temp. Output:** ±0.9°F @ 72°F (±0.3°C @ 25°C).

**Accuracy, Temp Models with Passive Thermistor Temp Sensor:** ±0.36°F @ 77°F (±0.2°C @ 25°C).

**Hysteresis, RH:** ±1%.

**Repeatability, RH:** ±0.1% typical.

**Temperature Limits:** -40 to 140°F (-40 to 60°C).

**Storage Temperature:** -40 to 176°F (-40 to 80°C).

**Compensated Temperature Range, RH:** -4 to 140°F (-20 to 60°C).

**4 to 20 mA Loop Powered Models:** Power requirements: 10 to 35 VDC; Output signal: 4 to 20 mA.

**0 to 10 V Output Models:** Power requirements: 15 to 35 VDC or 15 to 29 VAC; Output signal: 0 to 10 V @ 5 mA max.

**0 to 5 V Output Models:** Power requirements: 10 to 35 VDC or 10 to 29 VAC; Output signal: 0 to 5 V @ 5 mA max.

**Response Time:** 15 s.

**Electrical Connections:** Removable screw terminal block.

**Drift:** < 1% RH/year.

**RH Sensor:** Capacitance polymer.

**Temperature Sensor:** 4 to 20 mA output, solid state band gap. Passive output: 10K @ 25°C thermistor (Dwyer curve A).

**Enclosure:** ABS.

**Enclosure Rating:** Designed to meet NEMA 3S (IP54).

**Weight:** 0.3 oz (8.5 g).

**Agency Approvals:** CE.