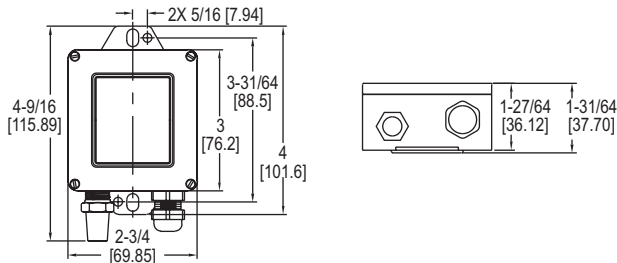


# WEATHER-RESISTANT HUMIDITY/TEMPERATURE TRANSMITTER

Compact Housing, Sintered Filter



Humidity/Temperature Transmitters

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 4-20 mA or 0-10 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%	4-20 mA	None
WHT-311	3%	4-20 mA	4-20 mA
WHT-320	3%	0-10 VDC	None
WHT-322	3%	0-10 VDC	0-10 VDC
WHT-330	3%	0-5 VDC	None
WHT-333	3%	0-5 VDC	0-5 VDC
WHT-31A	3%	4-20 mA	10K Ω Type III
WHT-32A	3%	0-10 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 4-20 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).  
**4-20 mA Loop Powered Models:** Power requirements: 10-35 VDC; Output signal: 4-20 mA.  
**0-10 V Output Models:** Power requirements: 15-35 VDC or 15-29 VAC; Output signal: 0-10 V @ 5 mA max.  
**0-5 V Output Models:** Power requirements: 10-35 VDC or 10-29 VAC; Output signal: 0-5 V @ 5 mA max.  
**Response Time:** 15 s.  
**Electrical Connections:** Removable screw terminal block.  
**Drift:** < 1% RH/year.  
**RH Sensor:** Capacitance polymer.  
**Temperature Sensor:** 4-20 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.