



SERIES WHT | WEATHER-RESISTANT HUMIDITY/TEMPERATURE TRANSMITTER



BENEFITS/FEATURES

- Easy installation into tight spaces with compact NEMA 3S housing
- Reduced installation costs with combination RH and temperature outputs as required

APPLICATIONS

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

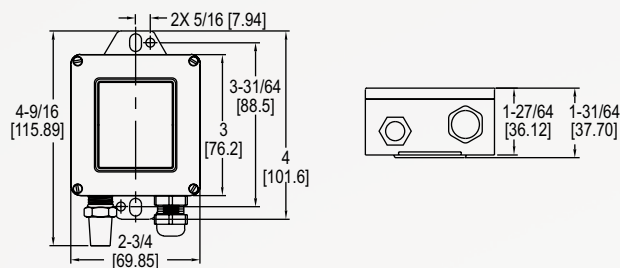
DESCRIPTION

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.

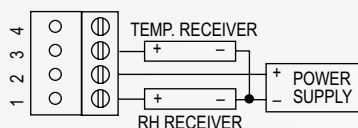
SPECIFICATIONS

Relative Humidity Range	0 to 100% RH.
Temperature Range	-40 to 140°F (-40 to 60°C).
Sensor Accuracy, RH	±2% @ 20 to 80% RH, ±3% @ 10 to 20%, 80 to 90% RH.
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).
Compensated Temperature Range, RH	-4 to 140°F (-20 to 60°C).
Power Requirements	4-20 mA loop powered models: 10-35 VDC; 0-10 V output models: 15-35 VDC or 15-29 VAC; 0-5 V output models: 10-35 VDC or 10-29 VAC.
Output Signal	4-20 mA loop powered models: 4-20 mA; 0-10 V output models: 0-10 V @ 5 mA max; 0-5 V output models: 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).
Compliance	CE.

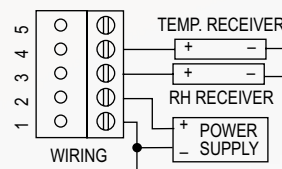
DIMENSIONS



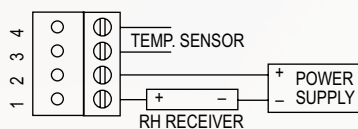
WIRING DIAGRAM



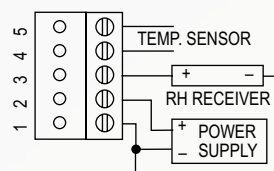
**Models with 4-20 mA RH output,
with or without 4-20 mA temperature output**



**Models with 0-5 V or 0-10 V RH output,
with or without 0-5 V or 0-10 V temperature output**



**Models with 4-20 mA RH output
and a passive thermistor temperature sensor**



**Models with 0-5 V or 0-10 V RH output and
a passive thermistor temperature sensor**

HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

SERIES	WHT	-31	0	TEMPERATURE
WHT: Weather-resistant humidity/temperature transmitter				0: None
RH OUTPUT				1: 4-20 mA
-31: 4-20 mA				2: 0-10 VDC
-32: 0-10 VDC				3: 0-5 VDC
-33: 0-5 VDC				A: 10K Ω type III



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