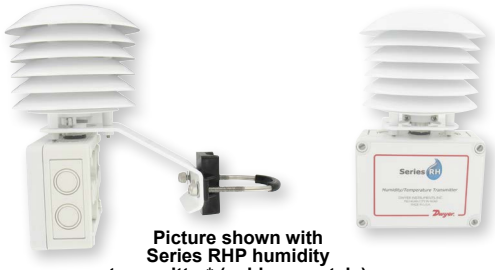
Dwyer

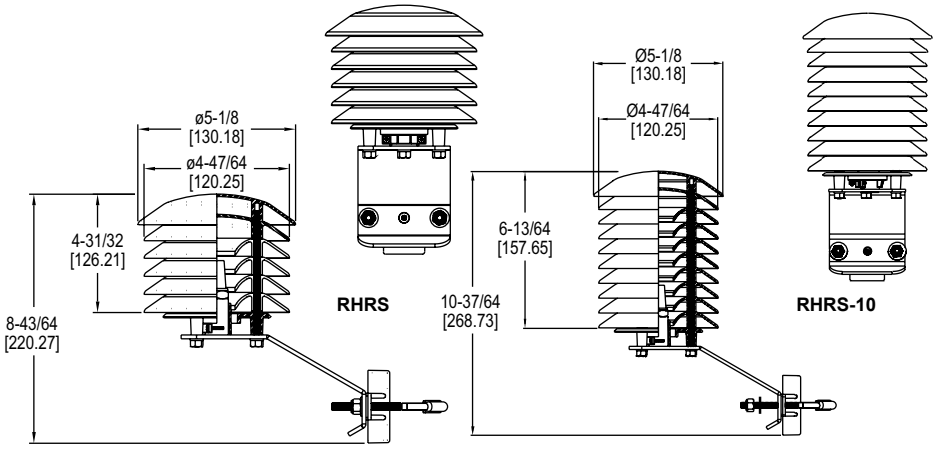
SERIES RHRS

OUTSIDE AIR HUMIDITY RADIATION SHIELDS

6 or 10 Plate Design, Integral Pipe Mounting Kit



Picture shown with Series RHP humidity transmitter* (sold separately)



The **Series RHRS Outside Air Humidity Radiation Shields** protects outside air humidity transmitters from rain and radiated heat. With the curved shape and color of the plates, air flow is able to move across the sensor to keep radiated temperatures from rooftops and surrounding surfaces from affecting humidity readings.

BENEFITS/FEATURES
- Adjustable sensor mounting collar works with Dwyer RHP sintered filter outdoor air humidity transmitters or other RH devices
- Universal mount fits 3/4″ to 1-1/2″ pipe or flat surfaces

APPLICATIONS
- Building outside air reference
- Weather stations

MODEL CHART

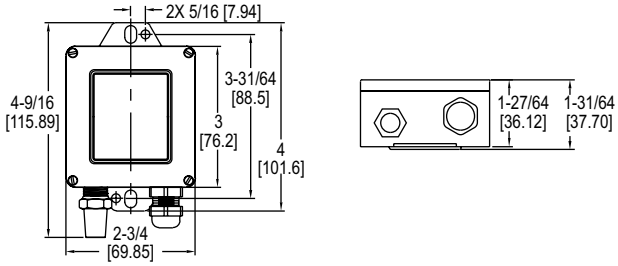
Model	Description
RHRS	6 plate radiation shield
RHRS-10	10 plate radiation shield

Note: Only sintered filter OSA models of Series RHP are compatible with the shield.

SERIES WHT

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 4-20 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.

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

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	10 kΩ Type III
WHT-32A	3%	0-10 VDC	10 kΩ 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).
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 @ 77°F (±0.5°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).
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.