The Compact Series WHT 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.

### 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 seconds.
- **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.

### Model Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Accuracy</th>
<th>RH Output</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHT-310</td>
<td>3%</td>
<td>4 to 20 mA</td>
<td>None</td>
</tr>
<tr>
<td>WHT-311</td>
<td>3%</td>
<td>4 to 20 mA</td>
<td>None</td>
</tr>
<tr>
<td>WHT-320</td>
<td>3%</td>
<td>0 to 10 V</td>
<td>4 to 20 mA</td>
</tr>
<tr>
<td>WHT-322</td>
<td>3%</td>
<td>0 to 10 V</td>
<td>0 to 10 V</td>
</tr>
<tr>
<td>WHT-330</td>
<td>3%</td>
<td>0 to 5 V</td>
<td>None</td>
</tr>
<tr>
<td>WHT-333</td>
<td>3%</td>
<td>0 to 5 V</td>
<td>0 to 5 V</td>
</tr>
<tr>
<td>WHT-31A</td>
<td>3%</td>
<td>4 to 20 mA</td>
<td>10 K Ohm</td>
</tr>
<tr>
<td>WHT-32A</td>
<td>3%</td>
<td>0 to 10 V</td>
<td>10 K Ohm</td>
</tr>
</tbody>
</table>

Note: For 2% accuracy, change the leading 3 to a 2. (For example, WHT-210)

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The AQStick™ Ambient Volatile Organic Compound (VOC) Monitor monitors ambient air quality by detecting the VOC content in the air. Some common sources of VOC contamination are carpets, building materials, paints, cleaners, and tobacco smoke. Even low concentrations of these compounds can affect building occupants' comfort. A computer's USB port provides power for the sensor and the LED lights which change color in accordance with the ambient air quality. In order to correspond with ASHRAE's standards for air quality, the VOC reading from the monitor is converted from a percentage contaminated to an equivalent PPM reading of CO2. The percentage contaminated multiplied by 2000 PPM of CO2 gives the equivalent concentration of CO2. From the factory, the LED is green under 1000 PPM CO2, yellow for 1000 to 1500 PPM CO2, and red above 1500 PPM CO2. These factory values can be changed using the free online software. When using the free online software, the AQStick™ ambient VOC monitor can log and graph how building conditions change over time.

### SPECIFICATIONS

- **VOC's Detected:** Alcohols, aldehydes, ketones, organic acids, aliphatic and aromatic hydrocarbons.
- **Sensor:** MEMS metal oxide semiconductor.
- **Power:** Powered from PC USB port.
- **Temperature Limits:** 32 to 122°F (0 to 50°C).
- **Humidity Limits:** 5 to 95% RH (non-condensing).
- **Agency Approval:** CE.

### Model

Model AQ-11, Ambient Volatile Organic Compound Monitor

AQStick™ is a trademark of Dwyer Instruments, Inc.