The Series HHT Hazardous Area Humidity/Temperature Transmitter takes accurate measurements in the harshest of environments. The explosion-proof model is offered with 4-20 mA output for humidity and temperature, and do require an intrinsically safe barrier to meet hazardous area approvals.

**FEATURES/BENEFITS**
- FM approved explosion-proof and intrinsically safe models
- Integral LCD option
- Dust and grain handling

**APPLICATIONS**
- Process monitoring
- Offshore HVAC monitoring

**MODEL CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Protection</th>
<th>Description</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHT-EU</td>
<td>Explosion-proof</td>
<td>Humidity</td>
<td>No</td>
</tr>
<tr>
<td>HHT-IU</td>
<td>Intrinsically safe</td>
<td>Humidity</td>
<td>No</td>
</tr>
<tr>
<td>HHT-IT</td>
<td>Intrinsically safe</td>
<td>Humidity/temperature</td>
<td>No</td>
</tr>
<tr>
<td>HHT-EUCD</td>
<td>Explosion-proof</td>
<td>Humidity/temperature</td>
<td>Yes</td>
</tr>
<tr>
<td>HHT-IT-LCD</td>
<td>Intrinsically safe</td>
<td>Humidity/temperature</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KFD0-SCS-EX1.5S</td>
<td>Loop powered galvanic isolator</td>
</tr>
<tr>
<td>A-287</td>
<td>Replacement lid with filter material</td>
</tr>
<tr>
<td>A-450</td>
<td>Replacement bracket for pipe or surface mounting (Includes bracket and two 2” U-bolts)</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- **Relative Humidity Range:** 0 to 100% RH
- **Temperature Range:** -40 to 140°F (-40 to 60°C)
- **Accuracy:** ±2.5% 10 to 90% RH, ±0.9°F at 72°F (±0.3°C at 25°C)
- **Hysteresis:** ±1%
- **Repeatability:** ±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:** -40 to 140°F (-40 to 60°C)
- **Power Requirements:** For intrinsically safe models HHT-IX, 9.5-28 VDC. For explosion-proof models HHT-EX, 16.5-28 VDC.
- **Output Signal:** 4-20 mA, 2 channels for humidity/temperature models (loop power on RH).
- **Response Time:** 15 s
- **Electrical Connections:** Screw terminal block
- **Conduit Connection:** 1/2 female NPT
- **Drift:** < 1% RH/year
- **RH Sensor:** Capacitance polymer
- **Temperature Sensor:** Solid state band gap
- **Housing Material:** Aluminum
- **Display:** Optional 2 line alpha numeric, 8 characters/line. Temperature display is °F/°C selectable.
- **Display Resolution:** °F/°C selectable.
- **Display Resolution:** RH: 0.1%; Temperature: 0.1°F (0.1°C).
- **Weight:** 2 lb 8 oz (1134 g)
- **Agency Approvals:** CE, FM

The Series CDWP Carbon Dioxide Transmitter accurately monitors the CO₂ concentration in industrial and indoor environments to help achieve energy savings. For increased sensor life and accuracy, a single-beam dual-wavelength non-dispersive infrared (NDIR) sensor is used to eliminate light source aging effects. This sensing technology provides the highest level of accuracy compared to Automatic Baseline Correction methods, which can unintentionally shift the calibration on CO₂ levels and barometric pressure conditions.

**MODEL CHART**

<table>
<thead>
<tr>
<th>Example</th>
<th>CDWP</th>
<th>-05</th>
<th>W</th>
<th>-M4</th>
<th>-FC</th>
<th>CDWP-05W-M4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>02</td>
<td>05</td>
<td>10</td>
<td></td>
<td></td>
<td>Carbon dioxide transmitter</td>
</tr>
<tr>
<td>Mounting</td>
<td>W</td>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td>Wall mount Suspended mount</td>
</tr>
<tr>
<td>Electrical Connection</td>
<td>C1</td>
<td>C5</td>
<td>M4</td>
<td>M6</td>
<td></td>
<td>Cable gland 1 to 6 mm cable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M12 connection 4 to 6 mm cable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M12 connection 6 to 8 mm cable</td>
<td></td>
</tr>
<tr>
<td>Option</td>
<td>FC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Factory calibration certificate</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-CDWP-L</td>
<td>Replacement lid with filter material</td>
</tr>
<tr>
<td>A-CDWP-H</td>
<td>Suspended mount bracket</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- **Sensor:** Single beam, dual-wavelength NDIR.
- **Range:** CO₂: 0 to 2000, 0 to 5000, or 0 to 10000 ppm (depending on model).
- **Accuracy:** ± 40 ppm ±3% of reading
- **Temperature Dependence:** ±8 ppm/°C at 1100 ppm
- **Non-Linearity:** ± 16 ppm
- **Pressure Dependence:** 0.13% of reading per mm of Hg.
- **Response Time:** 300 s (Typ).
- **Temperature Limits:** 32 to 122°F (0 to 50°C).
- **Humidity Limits:** 10 to 95% RH (non-condensing).
- **Power Requirements:** 16-35 VDC or 19-28 VAC.
- **Power Consumption:** Average: 2 w; Peak: 3.75 w.
- **Output:** Current: 4-20 mA (max. 500 Ω); Voltage: 0-5 VDC or 0-10 VDC (min. 500 Ω).
- **Enclosure Rating:** IP64.
- **Mounting Orientation:** Vertically, with electrical connections points downward.
- **Weight:** 26.24 oz (744 g).
- **Agency Approvals:** CE

**FEATURES/BENEFITS**
- IP64 aluminum housing
- Gray finish tested to withstand 168 hour salt spray test
- Single-beam dual-wavelength sensor automatically corrects for aging effects
- Measures unfiltered light intensity directly and eliminates error from incorrect assumptions of gas concentration in theoretical logic assumption methods
- Universal outputs to work with any building management system

**APPLICATIONS**
- Animal husbandry
- Mechanical room
- CO₂ refrigeration monitoring
- Greenhouses