We offer a complete range of calibrated and amplified products that measure relative humidity (RH). Based on our robust patented capacitive technology, these sensors provide accurate measurement of dew point and absolute humidity by combining relative humidity and temperature measurements. Our sensors are qualified for the most demanding applications, including automotive, heavy truck, aerospace and home appliances. We offer a variety of output signals such as digital (Frequency, i²C) and analog voltage, as well as, customized and proprietary output signals including PWM, PDM, LIN and CAN.
### HUMIDITY SENSORS

#### HUMIDITY AND TEMPERATURE (NTC) COMPONENTS

**Analog Output**

- **MEAS HS1101LF**
  - **Package:** Through hole TO39 with side opening plastic cap
  - **Type:** Capacitive humidity
  - **Operating RH Range:** 0 to 100% RH
  - **Operating Temp.:** -60°C to 140°C
  - **Unique Features:**
    - Robust and recognized component
    - Suitable for most humidity applications
    - Cost effective solution
  - **Accuracy:** 180 pF, ±3 pF at 55% RH
  - **Dimensions (mm):** 10 x 10 x 19
  - **Typical Applications:** Applications requiring a robust humidity sensor in automotive, home appliance, outdoor, HVACR, consumer, printer, meteorology

**Digital Output**

- **MEAS HTU2X Series**
  - **Package:** DFN type
  - **Type:** Digital RH and NTC temperature
  - **Operating RH Range:** 0 to 100% RH
  - **Operating Temp.:** -40°C to 125°C
  - **Unique Features:**
    - Low power consumption
    - Fast response time
    - Very low temperature coefficient
    - I2C interface or PWM interface or SDM interface
  - **Accuracy:** ±3% RH at 25°C (10 to 95% RH)
  - **Dimensions (mm):** 3.0 x 3.0 x 1.0
  - **Typical Applications:** Humidity and temperature plug and play transducers for OEM demanding applications in automotive, home appliance, printer, medical, humidifier

- **MEAS HTU2XF Series**
  - **Package:** DFN type
  - **Type:** Digital RH and NTC temperature
  - **Operating RH Range:** 0 to 100% RH
  - **Operating Temp.:** -40°C to 125°C
  - **Unique Features:**
    - Low power consumption
    - Fast response time
    - Very low temperature coefficient
    - I2C interface or PWM interface or SDM interface
    - Optimal filter
  - **Accuracy:** ±3% RH at 25°C (10 to 95% RH)
  - **Dimensions (mm):** 3.0 x 3.0 x 1.0
  - **Typical Applications:** Humidity and temperature plug and play transducers for OEM demanding applications in automotive, home appliance, printer, medical, humidifier

#### HUMIDITY AND TEMPERATURE (NTC) MINI-MODULES

**Analog Voltage and Digital Output**

- **MEAS HTU3355PVBM/Wire**
  - **Package:** Cost effective, small size mini-module
  - **Type:** Analog voltage RH and NTC temperature
  - **Operating RH Range:** 0 to 100% RH
  - **Operating Temp.:** -40°C to 110°C
  - **Unique Features:**
    - PTFE filter (Optional)
    - Electronics fully protected (5 V)
    - Multiple connector choices (JST, Samtec board to board through hole)
    - Based on HTU21
  - **Calibration:** ±3% RH at 55% RH; ±0.25°C at 25°C
  - **Dimensions (mm):** 27 x 11.9 x Y (Depending on the connector, from 6 to 10.8 mm length)
  - **Typical Applications:** Humidity and temperature plug and play transducers for OEM demand applications in HVACR, home appliance, printer, medical, and outdoor

- **MEAS HTU383X/Wire**
  - **Package:** Cost effective small size mini-module
  - **Type:** Digital RH and NTC temperature
  - **Operating RH Range:** 0 to 100% RH
  - **Operating Temp.:** -40°C to 110°C
  - **Unique Features:**
    - PTFE filter (Optional)
    - Electronics fully protected (5 V)
    - Multiple connector choices (JST, Samtec board to board through hole)
    - Based on HTU21
  - **Calibration:** ±3% RH at 55% RH; ±0.25°C at 25°C
  - **Dimensions (mm):** 27 x 11.9 x Y (Depending on the connector, from 6 to 10.8 mm length)
  - **Typical Applications:** Humidity and temperature plug and play transducers for OEM demanding applications in HVACR, home appliance, printer, medical, and outdoor

- **MEAS HTG351xCH**
  - **Package:** Cost effective small size mini-module
  - **Type:** Analog voltage RH and NTC temperature
  - **Operating RH Range:** 0 to 100% RH
  - **Operating Temp.:** -40°C to 110°C
  - **Unique Features:**
    - Electronics fully protected with potting material (3.3 V or 5 V)
    - Multiple connector choices (JST, Samtec board to board through hole)
  - **Calibration:** ±3% RH at 55% RH; ±0.25°C at 25°C
  - **Dimensions (mm):** 27 x 11.9 x 6.7
  - **Typical Applications:** Humidity and temperature plug and play transducers for OEM low cost consumer applications

Specifications subject to change. Dimensions for reference purpose only.

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## HUMIDITY AND TEMPERATURE (NTC) PROBES

### Analog Output

<table>
<thead>
<tr>
<th>Package</th>
<th>MEAS HM1500LF</th>
<th>MEAS HM1520LF</th>
<th>MEAS HTM2500LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Probe, RH only</td>
<td>Probe, RH only</td>
<td>Probe, RH and temperature</td>
</tr>
<tr>
<td>Operating RH Range</td>
<td>0 to 100% RH</td>
<td>-40°C to 60°C</td>
<td>0 to 100% RH</td>
</tr>
<tr>
<td>Operating Temp.</td>
<td>-40°C to 60°C</td>
<td>-40°C to 60°C</td>
<td>-40°C to 85°C</td>
</tr>
<tr>
<td>Unique Features</td>
<td>Electronics fully protected with potting material</td>
<td>Electronics fully protected with potting material</td>
<td>Electronics fully protected with potting material</td>
</tr>
<tr>
<td>Calibration</td>
<td>±3% RH at 55% RH</td>
<td>±3% RH at 10% RH</td>
<td>±3% RH at 55% RH</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>57 x 11 x 11 (Standard wire length of 200 mm)</td>
<td>57 x 11.5 x 11.5 (Standard wire length of 200 mm)</td>
<td>86 x 11.5 x 11.5 (Standard wire length of 200 mm)</td>
</tr>
<tr>
<td>Typical Applications</td>
<td>Medical, telecommunication cabinets, green houses, process control, industrial</td>
<td>Medical, drying cabinets, low humidity, meteorology</td>
<td>Hygrostat, data loggers, baby cabinets</td>
</tr>
</tbody>
</table>

### HUMIDITY AND TEMPERATURE (NTC) SENSORS

#### Frequency Output Systems (Digital)

<table>
<thead>
<tr>
<th>Package</th>
<th>MEAS HTF3000LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>PCB for board to board</td>
</tr>
<tr>
<td>Operating RH Range</td>
<td>0 to 100% RH</td>
</tr>
<tr>
<td>Operating Temp.</td>
<td>-40°C to 85°C</td>
</tr>
<tr>
<td>Unique Features</td>
<td>Voltage supply from 3 to 8 VDC, Through hole or SMD, T and R available</td>
</tr>
<tr>
<td>Calibration</td>
<td>±3% RH at 55% RH, ±0.25°C at 25°C</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>12.5 x 18.5 x 11.2</td>
</tr>
<tr>
<td>Typical Applications</td>
<td>Passenger comfort improvement, hygrostat, HVACR, printer</td>
</tr>
</tbody>
</table>
# HUMIDITY SENSORS

## E&V HUMIDITY AND TEMPERATURE MODULES

<table>
<thead>
<tr>
<th>Package</th>
<th>Type</th>
<th>Operating RH Range</th>
<th>Operating Temp.</th>
<th>Unique Features</th>
<th>Calibration</th>
<th>Dimensions (mm)</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEAS H2TG, H2TD Series</strong></td>
<td>Cost effective module for automotive defogging application</td>
<td>0 to 100% RH</td>
<td>-40°C to 85°C</td>
<td>Electronics fully protected with potting material</td>
<td>±1.5°DP at 10°C &lt;br&gt; ±0.8°C at 25°C</td>
<td>27 x 32 x YY</td>
<td>Fogging and cabin energy control</td>
</tr>
<tr>
<td><strong>MEAS H2TD368x</strong></td>
<td>Cost effective module for truck defogging application</td>
<td>0 to 100% RH</td>
<td>-40°C to 85°C</td>
<td>Optional bracket and cover for installation</td>
<td>±1.5°DP at 10°C &lt;br&gt; ±0.8°C at 25°C</td>
<td>22 x 43 x 10</td>
<td>Fogging and cabin energy control</td>
</tr>
<tr>
<td><strong>MEAS HTM2500B6Cy</strong></td>
<td>Engine probe for truck and automotive</td>
<td>0 to 100% RH</td>
<td>-40°C to 105°C</td>
<td>Electronics fully protected with potting material</td>
<td>±3% RH at 55% RH &lt;br&gt; ±0.8°C at 25°C</td>
<td>70 x 64.5 x 54.5</td>
<td>Humidity and temperature engine control</td>
</tr>
<tr>
<td><strong>MEAS HTD2800B11C6</strong></td>
<td>Trican engine probe for truck and automotive</td>
<td>0 to 100% RH</td>
<td>-40°C to 125°C</td>
<td>Configurable CAN Frame &lt;br&gt; Self diagnostic capabilities to comply with J1939, EPA / EURO and CARB requirements</td>
<td>±2.5 g/Kg at 25°C</td>
<td>76.3 x 64.3 x 55.9</td>
<td>Emission control application such as NOx control with air intake measurements, engine management</td>
</tr>
<tr>
<td><strong>MEAS HTD2610</strong></td>
<td>Engine probe for truck and automotive</td>
<td>0 to 100% RH</td>
<td>-40°C to 125°C</td>
<td>12 V power supply</td>
<td>±1° DP at 25°C</td>
<td>62.24 x 24.0 x 54.0</td>
<td>Humidity and temperature automotive passenger car, engine and emission management</td>
</tr>
</tbody>
</table>

*Custom options available. Please consult factory.

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