Humidity/Temperature Transmitters combine the Removable screw terminal block. Duct mount: PBT; OSA: Polycarbonate. ±1%.

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ø3/16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-41/64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>55/64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-9/64</td>
</tr>
<tr>
<td>Duct mount only, optional 2-line alpha numeric, 8 characters/line.</td>
<td></td>
<td>3-1/8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-1/4</td>
</tr>
<tr>
<td>Types 1, 2, 3: Solid state band gap; Curves A, B, C: Thermistor; Curves D, E: Platinum RTD DIN 385.</td>
<td></td>
<td>55/64</td>
</tr>
<tr>
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<td>2-11/64</td>
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<td></td>
<td>2-15/64</td>
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<td>1/2˝ NPS</td>
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<td>130.18</td>
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<td></td>
<td></td>
<td>79.38</td>
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</tbody>
</table>

RHP-2XXX ±2% 10-90% RH @ 25°C; RHP-3XXX ±3% 20-80% RH @ 25°C; RHP-5XXX ±5% 20-80% RH @ 25°C.

Power requirements: 15-35 VDC or 15-29 VAC; Output signal: 0-10 V @ 5 mA max.

< 1% RH/year.

-40 to 140°F (-40 to 60°C).

Duct mount: .616 lb (.3 kg); OSA: 1 lb (.45 kg).

Duct mount: PG11 or PG16 (1/2˝ conduit) knockouts.

Series RHRS separately.

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dwyer-inst.com/Product/SeriesRHP
**HUMIDITY/Temperature Transmitters**

- **Humidity Transmitters**
  - CE certified.
  - Removable screw terminal block.
  - < 1% RH/year.
  - Types 1, 2, 3: Solid state band gap; Curves A, B, C: Thermistor; Curves D, E: Platinum RTD DIN 385.
  - -40 to 140°F (-40 to 60°C).

**RH Transmitters**

- RHP-2XXX ±2% 10-90% RH @ 25°C; RHP-3XXX ±3% 20-80% RH @ 25°C; RHP-5XXX ±5% 20-80% RH @ 25°C.

**Description**

- Duct mount: PBT; OSA: Polycarbonate.
- Duct mount: NEMA 4X (IP66) for housing only; OSA: NEMA 4X (IP66).
- RH: 0.1%; ±1°F (±0.1°C).
- Duct mount only, optional 2-line alphanumeric, 8 characters/line.
- -40 to 140°F (-40 to 60°C).
- ±0.1% typical.
- Power requirements: 10-35 VDC; Output signal: 4-20 mA.

**Capacitance Polymer**

- -40 to 176°F (-40 to 80°C).
- DIN Class B; ±0.3°C @ 0°C (±0.54°F @ 32°F).
- Power requirements: 15-35 VDC or 15-29 VAC; Output signal: 0-10 V @ 5 mA max.
- Duct mount: .616 lb (.3 kg); OSA: 1 lb (.45 kg).
- 15 s.
- Duct mount: 1/2˝ NPS; OSA: PG11 or PG16 (1/2˝ conduit) knockouts.

**Accessories**

- Retrofit tool for fitting O-ring on RHP-D/M models for new filter A-RHP-FC
- Replacement plastic hydrophobic filter
- LCD display
- NIST traceable calibration certificate

**Specifications**

- **Humidity Range**
  - 0 to 100% RH.
- **Temperature Range**
  - 40°F to 160°F (-20 to 60°C).
- **Accuracy, RH**
  - RHP-XXXX ±2%; 15-90% RH @ 25°C; RHP-XXXX ±3% 20-80% RH @ 25°C; RHP-XXXX ±5% 20-80% RH @ 25°C.
- **Accuracy, Thermistor Temp Sensor**
  - ±0.2°C @ 25°C (±0.36°F @ 77°F).
- **Accuracy, Solid State Band Gap**
  - ±0.9°F @ 77°F (±0.5°C @ 25°C).
- **Hysteresis**
  - ±0.1%.
- **Repeatability**
  - ±0.1% typical.
- **Temperature Limits**
  - 40°F to 140°F (-20 to 60°C).
- **Storage Temperature**
  - 40°F to 176°F (-20 to 80°C).
- **Compensated Temperature Range**
  - 4 to 140°F (-20 to 60°C).
- **4-20 mA Loop Powered Models**
  - Power requirements: 15-35 VDC; Output signal: 4-20 mA.
- **0-5/10 V Output Models**
  - Power requirements: 15-35 VDC or 15-20 VAC; Output signal: 0-10 V @ 5 mA max.
- **Response Time**
  - 15 s.
- **Electrical Connections**
  - Removable screw terminal block.
- **Conduit Connection**
  - Drift: ±1% RH/year.
- **RH Sensor**
  - Capacitive polymer.
- **Temperature Sensor**
  - Types 1, 2, 3: Solid state band gap; Curves A, B, C: Thermistor; Curves D, E: Platinum RTD DIN 385.
- **Enclosure**
  - Dust mount: PBT; OSA: Polycarbonate.
- **Enclosure Rating**
  - Dust mount: NEMA 4/4X (P96) for housing only; OSA: NEMA 4X (P96).
- **Display**
  - Dust mount only, optional 2-line alphanumeric, 8 characters/line.
- **Display Resolution**
  - RH: 0.1%; ±1°F (±0.1°C).
- **Weight**
  - Dust mount: 0.8 lb (3.6 kg), OSA: 1 lb (450 g).

**Applications**

- Air economizers
- Outdoor temperature and relative humidity reference for building systems

**Features/Benefits**

- 2%, 3%, or 5% accuracy models to meet project requirements
- Integral temperature sensors reduces number of devices to install
- Radiation shield option protects sensor from radiant heating effects allowing for accurate readings even when mounted in direct sunlight

**How to Order**

- Use the **bold** characters from the chart below to construct a product code.
- **Series**
  - RHP: RH/Passive temperature sensor transmitter
- **Accuracy**
  - -2%: 2% accuracy
  - -3%: 3% accuracy
  - -5%: 5% accuracy
- **Housing Type**
  - D: Duct mount with plastic hydrophobic filter
  - O: OSA (outside air)
  - S: OSA with sintered filter*
  - R: Radiation shield
- **Options**
  - -LCD: LCD display
  - -NIST: NIST traceable calibration certificate
- **Dimensions**
  - Print in U.S.A. 4/20     DS-RHP Rev. 4
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  - dwyer-inst.com/Product/SeriesRHP

**Accessories**

- A-RHP-FC Replacement plastic hydrophobic filter
- A-RHP-RJ Retrofit tool for fitting O-ring on RHP-D/M models for new filter

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