The EE061 probe is ideal for cost-effective, accurate and reliable measurement of relative humidity (RH) and temperature (T) in OEM applications. The measured RH data is available as 4…20 mA, 2-wire output. The device is available also with an additional 4-wire passive T output.

The EE061 features high quality E+E RH sensing elements, which stand for outstanding measurement performance and high resistance to chemicals such as chlorine and ammonia.

The combination of IP65 protection class and E+E proprietary sensor protection lead to outstanding long term stability even in polluted environment.

### Protective Sensor Coating

The E+E proprietary sensor coating is a hygroscopic layer applied to the active surface of the RH sensing element. The coating extends substantially the life-time and the measurement performance of the E+E sensor in corrosive environment (salts, off-shore applications). Additionally, it improves the sensor’s long term stability in dusty, dirty or oily applications by preventing stray impedances caused by deposits on the active sensor surface.

### Typical Applications

- stables
- green houses
- humidifiers and dehumidifiers
- monitoring of storage rooms

### Features

- excellent price / performance ratio
- very good long term stability
- easy installation
- compact design

### Technical Data

#### Measurands

**Relative humidity**
- Working range: 0…100 % RH
- Analogue output: 4…20 mA (2-wire) RL<500 Ohm
- Accuracy at 20 °C (68 °F), 12 V DC 1):
  - ±3 % RH (10…90 % RH)
  - ±5 % RH (0…10 % RH and 90…100 % RH)
- Temperature dependence typ.: ±0.03 % RH/°C

**Temperature (passive)**
- Output: resistive, 4-wire
- Choice of T-sensor: according to ordering guide

#### General

- Supply voltage: 9 V DC - 28 V DC
- Current consumption: typ. 1.5 mA
- Electrical connection: cable PVC 0.5 m (1.6 ft) / 3 m (9.8 ft) / 10 m (32.8 ft), with wire ferrules
  - model M2: 2 x 0.50 mm²
  - model M6: 8 x 0.14 mm²
- Enclosure material: Polycarbonate
- Protection class: IP65
- Electromagnetic compatibility: EN61326-1
  - EN61326-2-3
- Working temperature range: -40...+60 °C (-40...140 °F)
- Storage temperature range: -40...+60 °C (-40...140 °F)

1) Traceable to intern. standards, administrated by NIST, PTB, BEV...

The accuracy statement includes the uncertainty of the factory calibration with an enhancement factor k=2 (2-times standard deviation).

The accuracy was calculated in accordance with EA-4/02 and with regard to GUM (Guide to the Expression of Uncertainty in Measurement).
### Dimensions in mm (inch)

![Dimensions Diagram]

### Ordering Guide

<table>
<thead>
<tr>
<th>Hardware Configuration</th>
<th>EE061-</th>
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<tbody>
<tr>
<td><strong>Model</strong></td>
<td>Model: humidity</td>
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<tr>
<td></td>
<td>humidity with temperature passive</td>
</tr>
<tr>
<td></td>
<td>M2</td>
</tr>
<tr>
<td></td>
<td>M6</td>
</tr>
<tr>
<td><strong>T-sensor passive</strong></td>
<td>Pt100 DIN A</td>
</tr>
<tr>
<td>(see <a href="http://www.eplus.com/R-T_Characteristics">www.eplus.com/R-T_Characteristics</a>)</td>
<td>Pt1000 DIN A</td>
</tr>
<tr>
<td></td>
<td>NTC 10k ±1 %, B25/100 = 3950 k</td>
</tr>
<tr>
<td><strong>Filter</strong></td>
<td>membrane</td>
</tr>
<tr>
<td></td>
<td>metal grid</td>
</tr>
<tr>
<td><strong>Coating</strong></td>
<td>without coating</td>
</tr>
<tr>
<td></td>
<td>with coating</td>
</tr>
<tr>
<td><strong>Cable length</strong></td>
<td>0.5 m (1.6 ft)</td>
</tr>
<tr>
<td></td>
<td>3 m (9.8 ft)</td>
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<tr>
<td></td>
<td>10 m (32.8 ft)</td>
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</tbody>
</table>

### Order Example

**EE061-M6TP1F3C1KL300**

- **Model:** humidity with temperature passive
- **T-sensor passive:** Pt 100 DIN A
- **Filter:** metal grid
- **Coating:** with coating
- **Cable length:** 3 m (9.8 ft)

### Accessories

- Plastic mounting flange Ø12 mm (0.47") black HA010214
- Wall mounting clip Ø12 mm (0.47") HA010211
- Protection cap for Ø12 mm (0.47") probe HA010783