

### 1. Description.

The **EE07 Kit** is a interchangeable humidity / temperature sensor whit digital output provided with radiation shield.



Picture 1 - Product Image

Ideal for demanding climate control and OEM applications.

The wide T working range, the T compensation and the choice of filter caps make EE07 Kit appropriate for both indoor and outdoor use.

Due to the excellent RH and T accuracy, the sensor is employed with provided with radiation shield even in meteorology.

The E+E proprietary coating protects the humidity sensor against corrosion and dirt, which leads to best long term stability even in harsh environment.

The measured values are available on the serial E2 interface.

The M12 connector allows for EE07 replacement within seconds.

### 2. Typical Applications.

- Demanding climate control
- Outdoor and meteorology
- OEM applications

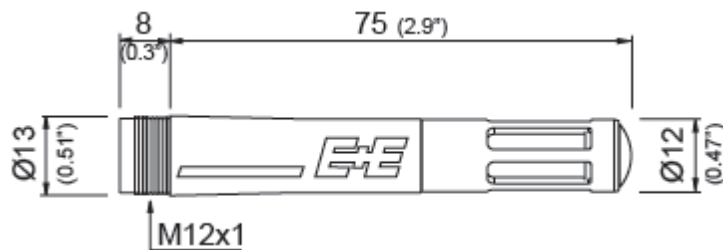
### 3. Features.

- Outstanding relative humidity and temperature accuracy
- Excellent long term stability
- Digital output
- Pluggable and interchangeable

#### 4. Technical Information.

Supply voltage (Class III)	3.8Vdc - 5.5Vdc
Current consumption	< 1.5mA
Voltage digital interface	Max. 3.5V
Housing	Polycarbonate - IP65
Electromagnetic compatibility	<ul style="list-style-type: none"> <li>• EN 61326-1</li> <li>• EN 61326-2-3</li> </ul>
Temperature range	<ul style="list-style-type: none"> <li>• Operative: -40°C ÷ +80°C</li> <li>• Warehousing: -40°C ÷ +60°C</li> </ul>
Max cable length	30m
Temperature - Transducer type	PT1000 (tolerance class A, DIN EN 60751)
Temperature - Digital output (2 wires)	Output value: -40°C ÷ +80°C
Temperature - Measure accuracy	± 0.1°C @ 20°C
Relative humidity - Transducer type	E+E HC105
Relative humidity - Digital output (2 wires E2 interface)	Output value: 0.00 ÷ 100% RH
Relative humidity - Working range	0.00 ÷ 100% RH
Relative humidity - Measure accuracy (including hysteresis and nonlinearity)	<ul style="list-style-type: none"> <li>• ±2% RH (0÷90% RH)</li> <li>• ±3% RH (90÷100% RH)</li> </ul> Traceable to international standards, administrated by NIST, PTB, BEV
Relative humidity - Temperature dependance	< (0.025 + 0.0003 x RH) [%RH / °C]

#### 5. Mechanical dimensions.



Picture 2 - Mechanical dimensions

**6. Connection diagram.**



Picture 3 - Connections

**7. Sensor coating.**

The E+E proprietary sensor coating is a protective layer applied to the sensing element. The coating extends substantially the lifetime and the measurement performance of EE07 in corrosive environment. Additionally, it improves relevantly the long term stability in dusty, dirty or oily applications by preventing stray impedances caused by deposits on the active sensor surface.

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## 8. Reference standards.

EN 61010 -1

For electromagnetic compatibility

EN 61000 - 3 - 2

EN 61000 - 3 - 3

EN 300 220 -2

EN 301 489 - 03

EN 61000 - 6 -1

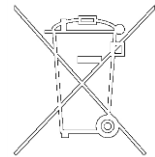
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This symbol indicates that this product is compliant with the European Directive 2011/65/CE that restricts the use of substances in the manufacturing of electronic devices.



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The "WEEE" logo on the label indicates that this product is compliant with the "WEEE" EC Directive. This symbol (valid only in the European Union countries) indicates that the product it is applied to, MUST NOT be discarded with ordinary household or industrial waste, but must be sent to an authorized reception point. The end user should contact the device provider, either the manufacturer or the reseller, in order to agree a collection and disposal process, after having checked the terms and conditions of sale.



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*The features shown may be subject to change without notice.*