

# EE061

## OEM Humidity / Temperature Transmitter with Current Output

EE061 probes are the ideal solution for cost-effective, highly accurate and reliable measurement of relative humidity and temperature.

The analogue humidity output provides a current signal with 4-20mA.

A passive temperature output signal is available.

Wide temperature and supply voltage ranges, excellent long term stability and the optional sensor coating allow the use in many applications.



EE061

### 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

#### Measuring values

##### Relative humidity

|                                  |  |
|----------------------------------|--|
| Sensor                           | HC105  |
| Working range <sup>1)</sup>      | 0...100% RH  |
| Analogue output 0...100% RH      | 4...20mA (two wire) $R_t < 500\Omega$                |
| Accuracy at 20°C (68°F), 12V DC  | ±3% RH (10...90% RH)<br>±5% RH (<10% RH and >90% RH) |
| Temperature dependence [% RH/°C] | typ. ±0.03   |

##### Temperature passive

|                  |                         |
|------------------|-------------------------|
| Output           | resistive, 4 wire       |
| Type of T-Sensor | refer to ordering guide |

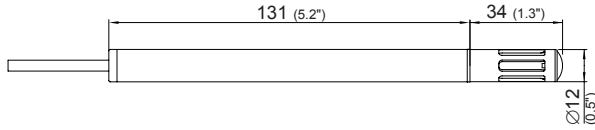
#### General

|                               |  |
|-------------------------------|--|
| Supply voltage                | 9V DC - 28V DC   |
| Current consumption           | typ. 1.5 mA  |
| Electrical connection         | cable with 0.5m (1.6ft) / 3m (9.8ft) / 10m (32.8ft)  |
| Housing                       | polycarbonate<br>IP65  |
| Sensor protection             | membrane filter, metal grid filter   |
| Electromagnetic compatibility | EN61326-1<br>EN61326-2-3   |
| Temperature ranges            | working temperature: -40...+60°C (-40...140°F)<br>storage temperature: -40...+60°C (-40...140°F) |



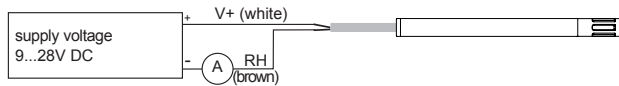
1) Refer to the working range of the humidity sensor

## Dimensions (mm)

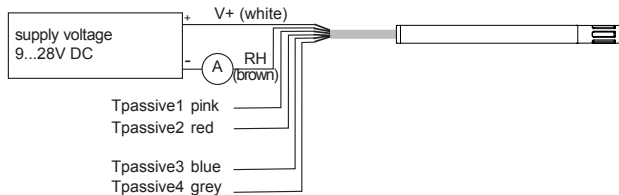


## Connection Diagram

with active humidity output:



with active humidity output and passive T-sensor:



## Ordering Guide

| MODEL                             | OUTPUT       | T-SENSOR<br>(passive only)              | FILTER                | COATING                   | CABLE LENGTH                              |
|-----------------------------------|--------------|---|-----------------------|---------------------------|---|
| humidity (F)                      | 4 - 20mA (6) | Pt100 DIN A (A)                         | membrane filter (1)   | without coating (no code) | 0.5m (1.6ft) (co code)                    |
| humidity+temperature passive (FP) |              | Pt1000 DIN A (C)<br>NTC 10K at 25°C (E) | metal grid filter (6) | with coating (HC01)       | 3m (9.8ft) (K300)<br>10m (32.8ft) (K1000) |
| <b>EE061-</b>                     |              |   |                       |                           |   |

## Order Example

### EE061-FP6A6HC01K300

model: humidity+temperature passive  
output: 4 - 20mA  
T-sensor: Pt 100 DIN A

filter: metal grid filter  
coating: with coating  
cable length: 3m

## Accessories

For more information please refer to data sheet "Accessories"