

EE16 Series

Humidity / Temperature Transmitter for HVAC Applications

EE16 transmitters are the ideal solution for accurate measurement of relative humidity and temperature at a reasonable price in HVAC applications. The appropriate filter cap enables employment in heavily polluted environment.

The new developed E+E humidity sensors HC101 guarantee excellent long term stability and resistance against chemical pollutants. Their excellent reproducibility allows a simple low-cost-one-point calibration for very good accuracy over the entire working range.

EE16 transmitters are available as wall or duct mounted, with current or voltage output signals.



Typical Applications

building-automation
storage rooms
climate and ventilation control

Features

excellent price/performance ratio
wettable
long term stable

Technical Data

Measuring values

Relative Humidity

| | | |
|----------------------------------|--------------------------------------|-------------------------------|
| Sensor | HC101 | |
| Output appropriate 0...100% RH | 0-10 V | -1 mA < I _L < 1 mA |
| | 4-20 mA (two wire) | R _L < 500 Ohm |
| Working range | 10...95% RH | |
| Accuracy at 20°C (68°F) | ±3% RH | |
| Temperature dependence at 45% RH | typ. -0.05% RH / °C (-0.03% RH / °F) | |

Temperature

| | | |
|--|--------------------------------|-------------------------------|
| Sensor | Pt1000 (class A, DIN EN 60751) | |
| Output appropriate 0...50°C (32...122°F) | 0-10 V | -1 mA < I _L < 1 mA |
| | 4-20 mA (two wire) | R _L < 500 Ohm |
| Accuracy at 20°C (68°F) ¹⁾ | ±0.3°C (±0.5°F) | |

General

| | | | |
|-------------------------------|---|------------------------------------|--|
| Supply voltage | for 0 - 10 V | | 15 - 35V DC or 24V AC ±20% |
| | for 4 - 20 mA | | 10V + R _L x 20 mA < U _v < 35V DC |
| Current consumption | for DC supply | typ. 8 mA | |
| | for AC supply | typ. 20 mA _{eff} | |
| Electrical connection | screw terminals max. 1.5 mm ² (AWG 16) | | |
| Housing / protection class | Polycarbonat / IP65; Nema 4 | | |
| Cable gland | M16 x 1.5 | cable Ø 4.5 - 10 mm (0.18 - 0.39") | |
| Sensor protection | membrane filter, metal grid filter, stainless steel sintered filter | | |
| Electromagnetic compatibility | EN 61000-6-1 | EN 61326-1+A1+A2 | |
| | EN 61000-6-3 | | |
| Temperature range | working temperature: | -5...50°C (23...122°F) | |
| | storage temperature: | -25...60°C (-13...140°F) | |



1) Please note: temperature accuracy EE16-x6xx2x: ±0.5°C (±0.9°F)

