

EE060

OEM Humidity / Temperature Transmitter with Voltage Output

EE060 probes are the ideal solution for cost-effective, highly accurate and reliable measurement of relative humidity and temperature.

Excellent protection against external influences is ensured by the combination of completely encapsulated electronics and the long-term stable HCT01 sensor with E+E proprietary protective coating. EE060 is available with an integrated cable or a threaded connector, with wide temperature and supply voltage ranges and dual 0-1V, 0-5V or 0-10V analog outputs, for humidity and temperature.



EE060

Typical Applications

stables, incubators, hatchers
 green houses
 humidifiers and dehumidifiers
 monitoring of storage rooms
 HVAC applications

Features

very small dimensions
 excellent price/performance ratio
 very good long term stability
 easy installation
 well protected against dust and dirt

Technical Data

Measuring values

Relative humidity

Sensor	HCT01-00D
Working range ¹⁾	0...100% RH
Analogue output 0...100% RH	0-10V $-1.0 \text{ mA} < I_L < 1.0 \text{ mA}$ 0-5V $-0.2 \text{ mA} < I_L < 0.2 \text{ mA}$ 0-1V $-0.1 \text{ mA} < I_L < 0.1 \text{ mA}$

Accuracy at 24V DC, 20°C (68°F)
 and 0.2m/s (40 ft/min) $\pm 2.5\% \text{ RH}$

Temperature active

Sensor	Pt1000 DIN B
Analogue output -40...60°C (-40...140°F)	0-10V $-1.0 \text{ mA} < I_L < 1.0 \text{ mA}$ 0-5V $-0.5 \text{ mA} < I_L < 0.5 \text{ mA}$ 0-1V $-0.1 \text{ mA} < I_L < 0.1 \text{ mA}$

Accuracy at 24V DC, 20°C (68°F) $\pm 0.3^\circ\text{C}$ ($\pm 0.5^\circ\text{F}$)

Temperature passive (with 0-1V output and 8-pole connector only)

Output	resistive, 2-wire
Type of T-Sensor	refer to ordering guide

General

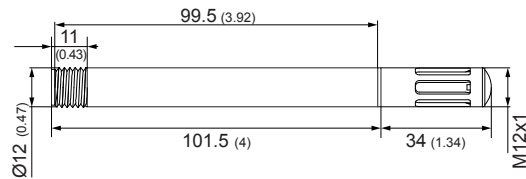
Supply voltage	HT1: 3.6...30V DC HT2: 10...30V DC HT3: 15...30V DC
Current consumption	typ. 1.5 mA
Electrical connection	cable or M12 connector
Housing	polycarbonate / IP65
Sensor protection	membrane filter
Electromagnetic compatibility ²⁾ (industrial environment)	EN61326-1 EN61326-2-3
Temperature ranges	working temperature: -40...+60°C (-40...140°F) storage temperature: -40...+60°C (-40...140°F)



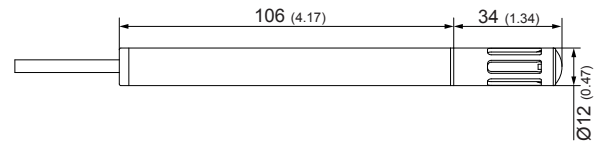
1) Refer to the working range of the humidity sensor!
 2) Analogue output 0-1V is not protected against surge!

Dimensions in mm (inch)

connector version



cable version



Connection Diagram

connector version

Connector 4-pole (M)

- 1...V+
- 2...RH-out
- 3...GND
- 4...T-out



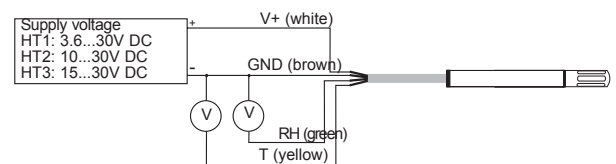
Supply voltage
HT1: 3.6...30V DC
HT2: 10...30V DC
HT3: 15...30V DC

Connector 8-pole (M)

- 1...T-passive
- 2...not connected
- 3...not connected
- 4...RH-out
- 5...T-out
- 6...GND
- 7...T-passive
- 8...V+



cable version



Ordering Guide

ANALOG OUTPUT	T-SENSOR PASSIVE (with 0-1V output and 8-pole connector only)	ELECTRICAL CONNECTION	CABLE LENGTH	FILTER
0 - 1V (1)	none (x)	connector 4-pole (PM)	0.5m (1.6ft) (A)	membrane filter (B)
0 - 5V (2)	Pt1000 DIN A (C)	connector 8-pole (for T-Sensor passive) (PV)	1.5m (4.9ft) (C)	
0 - 10V (3)	NTC 10k at 25°C (E)	cable (PN)	3m (9.8ft) (E)	
			with connector (x)	
EE060-HT				

Order Example

EE060-HT2xPMxB

Output: 0-5V
T-Sensor passive: none
El. Connection: connector 4-pole
Cable length: with connector
Filter: membrane filter

EE060-HT1CPVxB

Output: 0-1V
T-Sensor passive: Pt1000 DIN A
El. Connection: connector 8-pole
Cable length: with connector
Filter: membrane filter

Accessories

Female connector 4pol. self assembly M12x1
Female connector 8pol. self assembly M12x1
Connection cable 4pol. M12x1 male-female, shielded, 2m (6.5ft)
Connection cable 4pol. M12x1 male-female, shielded, 5m (16.4ft)
Connection cable 4pol. M12x1 male-female, shielded, 10m (32.8ft)
Connection cable 8pol. M12x1-female - free cable end, shielded, 3m (9.8ft)
Connection cable 8pol. M12x1-female - free cable end, shielded, 5m (16.4ft)
Connection cable 8pol. M12x1-female - free cable end, shielded, 10m (32.8ft)
Plastic mounting flange for duct mounting

HA010707
HA010704
HA010816
HA010817
HA010818
HA010323
HA010324
HA010325
HA010202