

EE150

Humidity and Temperature Transmitter for HVAC Applications

The EE150 is a compact, accurate and reliable transmitter for HVAC applications, available with analog current or voltage outputs for relative humidity (RH) and temperature (T), as well as an optional passive T-Sensor output. It employs an E+E capacitive humidity sensor element with excellent long term stability and resistance against pollutants.

The compact IP65/NEMA 4 enclosure and the Ø 6 mm stainless steel probe minimize installation costs, while the PTFE filter cap provides outstanding protection against contamination. External mounting holes allow installation with closed cover, the electronics are protected against construction site pollution.

With an optional configuration kit and free software the user can set the output scaling and perform one or two point adjustment for humidity and temperature.



Typical Applications

Heating, ventilation, air conditioning
Building management

Features

IP65/NEMA 4 compact enclosure
Ø 6 mm stainless steel probe
Free scaleable outputs
Resistance against pollutants
Free configuration software

Technical data

Measured values

Relative Humidity

Working range	10...90 % RH
Accuracy at 20 °C	±3 % RH (30...70 % RH), otherwise ±5 % RH
Temperature dependency	typ. ±0.05 % RH/°C

Temperature

Working range	-5...55 °C (23...131 °F)
T-Accuracy at 20 °C	±0.3 °C


Outputs

Analog output	0-10 V	$R_L \geq 10 \text{ k}\Omega$
(0...100 % RH; T: see ordering guide)	4-20 mA (two-wire)	$R_L \leq 500 \text{ }\Omega$

Passive T-sensor

2-wire	see ordering guide
Wires resistance (terminal - sensor)	typ. 0.5 Ohm

General

Power supply (Class III) 	15 - 35 V DC or 24 V AC ±20 %	
for 0 - 10 V	10 V + $R_L \times 20 \text{ mA} < U_v < 35 \text{ V DC}$	
for 4 - 20 mA		
Current consumption	with DC power supply	typ. 5 mA
	with AC power supply	typ. 13 mA _{eff}
Connection	Screw terminals, max. 1.5 mm ²	
Housing material	Polycarbonate, UL94V-0 approved	
Protection class	IP65 / NEMA 4	
Cable gland	M16 x 1.5 / UL94-V2	
Sensor protection	PTFE filter, non-removable	
Electromagnetic compatibility	EN61326-1	EN61326-2-3
	FCC Part 15 Class B	ICES-003 Issue 5 Class B
Working conditions	-5...55 °C (23...131 °F)	0...95 % RH (non-condensing)
Storage conditions	-25...60 °C (-13...140 °F)	20...80% RH



Accessories

Product configuration adapter	see data sheet EE-PCA
Product configuration software	EE-PCS (free download: www.epluse.com/EE150)
Power supply adapter	V03 (see data sheet Accessories)
Conduit adapter, M16x1.5 to 1/2"	HA011110

Scope of Supply

- EE150 Humidity and Temperature Transmitter
- Cable gland
- Mounting flange (only at duct mount version)
- Test report according to DIN EN10204 - 2.2