

# EasyLogic™ Sensors

## Duct Humidity & Temperature Transmitters

### CP-AI-TH-SE



#### Product Description

The CP-AI-TH-SE is a series of duct-mount humidity and temperature transmitters designed for environmental monitoring and HVAC control applications. These devices measure relative humidity and temperature in a wide range of conditions.

These sensors are ideal for:

- HVAC system control for improved comfort and energy savings
- Hospitals, schools, museums and other workplaces requiring humidity control

#### Features

- High accuracy measurement
- Two terminal outputs: 4 to 20 mA or 0 to 10 Vdc
- Temperature sensing element: PT1000/10K thermistor/integrated circuit
- Temperature output: passive/active
- Supports DC and AC power supplies
- Key component for the LEED green building program, WELL Building Standard and RESET® Standard\*
- Compliant with ASHRAE standards for environmental control and indoor air quality

\*Leadership in Energy and Environmental Design (LEED) is a registered trademark of the US Green Building Council. The WELL Building Standard is a trademark of the International WELL Building Institute in the United States and other countries.

#### Available Products

Part Number	Description
CP-AI-TH-SE-5200	Duct-mount humidity and temperature transmitter, 2% RH, PT1000
CP-AI-TH-SE-6200	Duct-mount humidity and temperature transmitter, 2% RH, NTC 10K thermistor
CP-AI-TH-SE-1200	Duct-mount humidity and temperature transmitter, 2% RH, Digital temperature sensor

#### Specifications

General	
Operating voltage	24 Vac ±10% or 12 to 30 Vdc*
Frequency	50/60Hz
Power consumption	≤1 VA
Humidity Sensor	
Sensor type	Solid state, integrated circuit
Measuring range	0 to 100% RH (non-condensing)
Accuracy	2% FS (@ 25 °C, 20 to 80% RH)**
Hysteresis	1.5% RH (@ 25 °C)
Analog output	DC power supply: 0 to 10V/4 to 20mA AC power supply: 0 to 10V
Output power	Min. load resistance for 0 to 10V operation: 10kΩ Min. input voltage for 4 to 20mA operation: 250 Ω loop = 19.2 VDC; 500 Ω loop = 21.6 VDC
Long term stability	0.5% RH per year***
Time constant	Approx. 20s in moving air
Temperature Sensor	
Sensor type	PT1000 Class A/10K type 3 thermistor/integrated circuit
Measuring range	-40 to 60 °C
Sensor accuracy	0.15°C @ 0 °C (for PT1000), 0.2°C @ 25 °C (for 10K thermistor), 0.2°C @ 25 °C (for integrated circuit)
Output	Passive/active
Time constant	Approx. 20s in moving air
Environmental	
Operating temperature	-40 to 60 °C
Operating humidity	0 to 100% RH (non-condensing)
Storage temperature	-40 to 60 °C
Storage humidity	0 to 100% RH (non-condensing)
IP rating	IP65
Housing material	PC+ABS, UL94-V0
Protection class	Class III

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## Specifications (cont.)

## Regulatory Information

Agency approvals	CE: EMC (EN61326-1) Green Premium: EU ROHS, China ROHS, REACH, RCM (Australia), UKCA (UK)
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## Weight

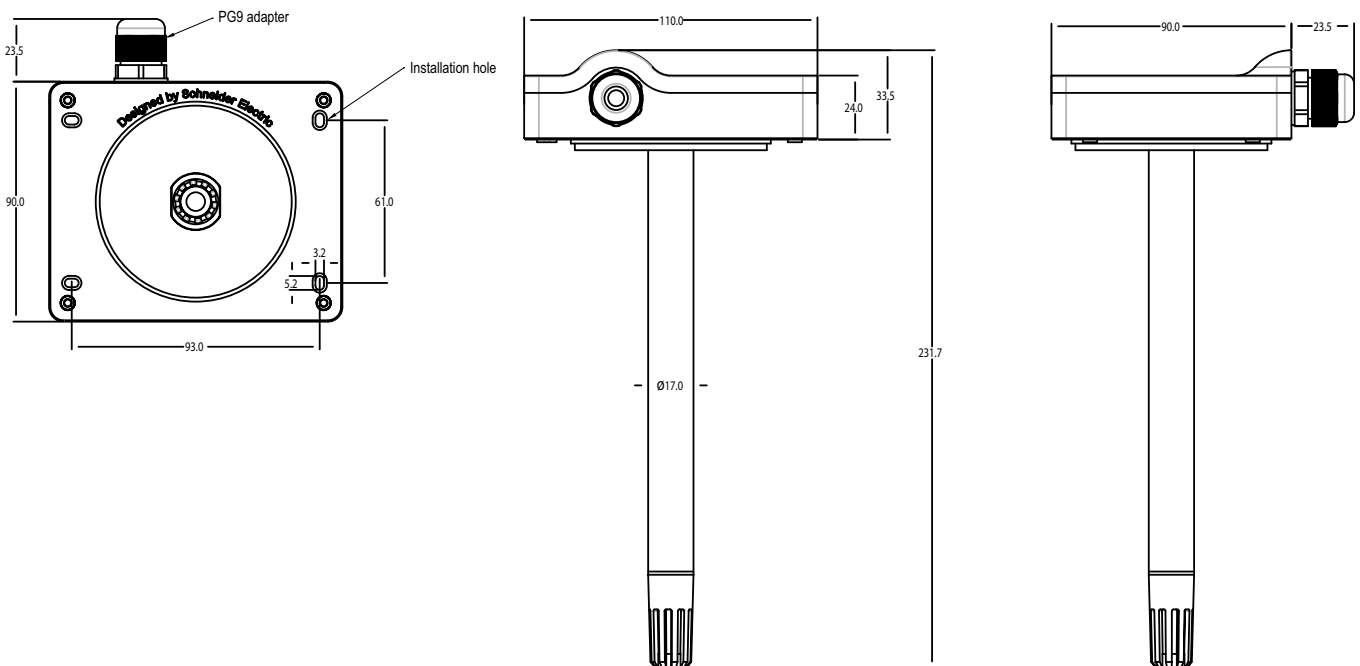
Including packaging 350 g

\*Class 2. Connect all devices with proper polarity; AC power supply only supports 0 to 10V output.

\*\*Include hysteresis, linearity and repeatability.

\*\*\*Typical value for a lab environment. Value may be higher in environments with with vaporized solvents, outgassing tapes, adhesives, packaging materials, etc.

## Dimensions (mm)



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