



# HTDT2500(-420)

Combined humidity/temperature transmitter  
for duct mounting

Transmitter for measuring temperature and relative  
humidity.

- Output signal 0...10 V DC or 4...20 mA, as well as passive PT1000
- Supply voltage 24 V AC or 15...35 V DC
- Protection class IP65

HTDT2500(-420) has a capacitive thin-film element that provides a signal proportional to the relative humidity. The transmitter has a high degree of accuracy. The measuring element responds quickly to changes in humidity.

The transmitter has excellent long-term stability and a low hysteresis. It can withstand up to 100 % RH (condensing) without accuracy being affected.

#### Filter

The transmitter sensor element is protected by a membrane filter. This can be changed to a sintered brass filter, which is recommended if operating in an environment with a high degree of pollution.

- High accuracy
- Short reaction time
- Long-term stability

#### Output signal

The output signal is either 0...10 V (HTDT2500) or 4...20 mA (HTDT2500-420). The transmitter also has a passive PT1000-signal.

#### Supply voltage

HTDT2500 uses a supply voltage of either 24 V AC or 15...35 V DC. The transmitter will automatically detect and adapt to the supply voltage connected.

HTDT2500-420 uses a supply voltage of 20...35 V DC, two-wire.

#### Housing

The transmitter has a Polycarbonate housing.

## Technical data

Supply voltage	24 V AC +/- 20 % or 15...35 V DC
HTDT2500	24 V AC +/- 20 % or 15...35 V DC
HTDT2500-420	20...35 V DC (RL <500 Ω), 11...35 V DC (RL <50 Ω)
Power consumption	15 mA (0...10 V output signal), 4...20 mA (4...20 mA output signal)
Output signal	Max. load 1 mA (0...10 V), >500 Ω (4...20 mA)
Cable connection	Screw connector
Material housing	Polycarbonate (PC)
Weight	0.23 kg
Ambient temperature	
electronics	-20...+50°C
probe	-20...+80°C
Storage temperature	-25...+60°C
Protection class	IP65



**EMC emissions & immunity standards:** This product conforms to the requirements of the EMC Directive 2004/108/EC through product standards EN 61326-1 and EN 61326-2-3.

**RoHS:** This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.

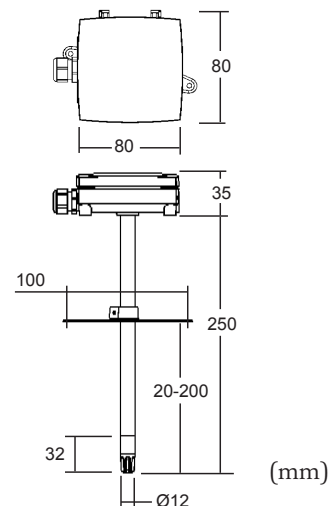
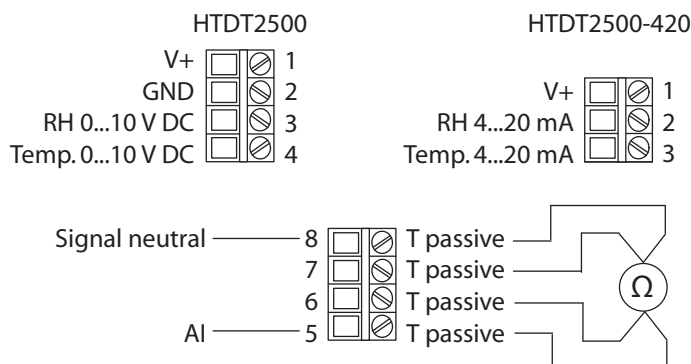
## Humidity

Sensor element	Capacitive thin-film element, HCT01
Measuring range	10...95 % RH
Output signal	0...10 V DC (4...20 mA), corresponding to 0...100 % RH
Accuracy	+/- 2.5 % RH at 20°C
Temperature dependency	Less than +/- 0.03 % RH/°C (at 60 % RH)
Hysteresis	Less than 2 % RH

## Temperature

Sensor element	MO1K (DIN class A according to IEC751)
Measuring range	0...50°C
Output signal	0...10 V or 4...20 mA, corresponding to 0...50°C
Accuracy	+/-0.3°C at 20 °C

## Wiring and dimensions



## Product documentation

Document name	Type
HTDT2500(-420)_inst	Instruction for HTDT2500(-420)

The document can be downloaded from [www.regin.se](http://www.regin.se)

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