



## HTDT2500(-420)

Combined humidity/temperature transmitter for duct mounting

*Transmitter for measuring temperature and relative humidity.*

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

### Function

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.

### Features

#### 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.

#### 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.

#### 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.

## Technical data

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

## Technical data, humidity

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

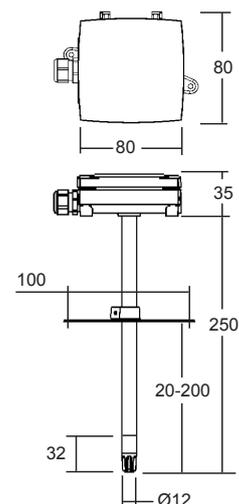
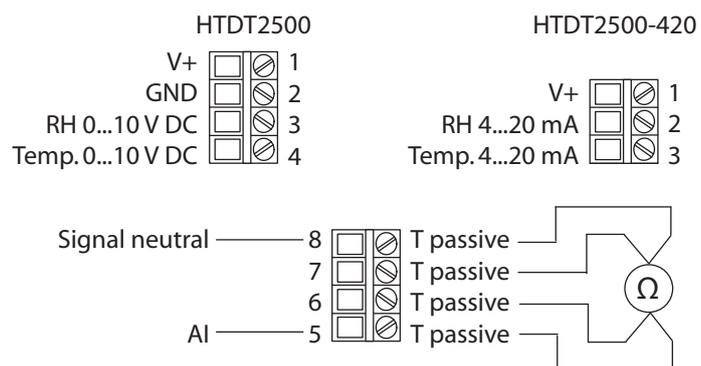
## Technical data, temperature

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

## CE

This product carries the CE mark. More information is available at [www.regincontrols.com](http://www.regincontrols.com)

## Wiring and dimensions



Measurements in mm unless otherwise specified.

## Product documentation

The product documentation can be downloaded from [www.regincontrols.com](http://www.regincontrols.com)