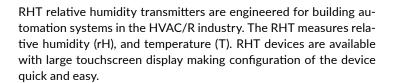


# HUMIDITY TRANSMITTERS RHT SERIES

Wall mount relative humidity transmitters for building automation systems



#### RHT series devices include:

- Separate field configurable output for each measurement parameter (rH, T).
- Proportional output options including: voltage (0-10 V, 2-10 V) and current (4-20 mA).
- Offset feature enabling field calibration for each measurement parameter (rH, T)

#### RHT series device options offer:

- 2" x 3" touchscreen display
- Field configurable relay for any of the two parameters
- Modbus configuration

# APPLICATIONS

RHT series devices are commonly used to monitor:

- humidity and temperature levels in offices, public spaces, hospitals, meeting rooms and classrooms
- humidity and temperature in various commercial applications
- humidity and temperature in HVAC/R environment





## **MODEL SUMMARY**

	RHT	
Description	Model	Product code
Relative humidity transmitter for room	RHT	301.002.001
- with display	RHT-D	301.002.002
- with relay and display	RHT-1R-D	301.002.004
- with Modbus configuration and display	RHT-MOD-D	301.002.003
- with Modbus configuration, relay and display	RHT-MOD-1R-D	301.002.005

# **HUMIDITY TRANSMITTERS RHT SERIES**

### **SPECIFICATIONS**

#### **Performance**

Measurement ranges:

Temperature: 0...50 °C Relative humidity: 0-100 %

Accuracy:

Temperature: <0.5 °C Relative humidity:

±2...3 % at 0...50 °C and 10-90 % rH

Total error band includes accuracy, hysteresis and temperature effect over 5...50 °C and 10-90% rH.

#### **Technical Specifications**

Media compatibility:

Dry air or non-aggressive gases

Measuring units: °C and % rH

Measuring element:

Temperature: Integrated

Relative humidity:

Thermoset polymer capacitive sensing element

**Environment:** 

Operating temperature: 0...50 °C Storage temperature: -20...70 °C Humidity: 0 to 95 % rH, non condensing

#### **Physical**

Dimensions:

Case: 99 x 90 x 32 mm

Weight:

150 g

Mounting:

3 screw holes slotted, 3.8 mm

Materials:

Case: ABS

Protection standard:

IP20

Display (Optional)

Touchscreen Size: 77.4 x 52.4 mm

**Electrical connections:** 

Power supply:

5-screw terminal block (24 V, GND, rH, T, NC) 0.2-1.5 mm<sup>2</sup> (12-24 AWG)

Relay out:

3-screw terminal block (NC, COM, NO)

0.2-1.5 mm<sup>2</sup> (12-24 AWG)

#### **Electrical**

Input:

24 VAC or VDC, ±10 %

Current consumption: max 90 mA (at 24 V) +  $\overset{\cdot}{\text{10}}$  mA for each voltage output or 20 mA for

each current output

Temperature output signal:

0–10 V, R>1  $k\Omega$ 

2-10 V, R>1 k $\Omega$  (optional voltage output, display required)

4-20 mA. R<500 Ω

Relative humidity output signal:

0–10 V, R>1  $k\Omega$ 2–10 V, R>1  $k\Omega$  (optional voltage output, display required)

4-20 mA, R<500  $\Omega$ 

Relay out:

SPDT Relay, 250 VAC / 30 VDC / 6 A Adjustable switching point and hysteresis

#### Conformance

Meets requirements for CE marking: EMC Directive 2014/30/EU RoHS Directive 2011/65/EU LVD Directive 2014/35/EU WEEE Directive 2012/19/EU

> **COMPANY WITH** MANAGEMENT SYSTEM **CERTIFIED BY DNV GL**

> = ISO 9001 = ISO 14001 =



## **HOW TO GENERATE A MODEL?**

Example: RHT-1R-D	Product Series						
	RHT	Relative humidity transmitter, analog configurations					
	RHT-MOD	Relative humidity transmitter, Modbus configuration  Mounting  Wall mount  Relay					
		-1R		With relay			
			Without relay				
					Display		
				-D	With Display		
					Without Display		
Model	RHT	-	-1R	-D			