

# Relative Humidity and Temperature Transmitters

## Wireless Relative Humidity and Temperature Transmitter

**RHT Air** is a wireless relative humidity and temperature transmitter which operates over long distances and allows configuration and parameters reading over a wireless network within 500 m distance. It has a long operating battery life combined with the convenience of a wireless sensor that avoids electrical noise susceptibility ensuring a robust and secure solution. Operation without cables or wires simplifies installation and relocation of devices. **RHT Air** operates on its own wireless network and works independently from the company's IT infrastructure.

- Relative humidity and temperature measurement over long distances
- Independent industrial wireless network
- Long operating battery life
- Easy network scalability
- Noise immunity



**RHT Air**

### Wall mounting



	RHT WM	RHT WM 485 LCD	RHT XS	RHT P10	RHT Air
Input Type	Integrated RHT probe		Extended RHT probe (3 m cable)	Extended RHT probe (flange mounting) (3 m cable)	Integrated RHT probe
Measurement Range	Temperature: -10 to 65 °C (14 to 149 °F) Humidity: 0 to 95% RH	Temperature: -40 to 70 °C (-40 to 150 °F) Humidity: 0 to 95% RH	Temperature: -40 to 120 °C (-40 to 248 °F) Humidity: 0 to 100% RH		Temperature: -10 to 70 °C (14 to 158 °F) Humidity: 0 to 95% RH
Accuracy	Temperature: ± 2 °C (3.6 °F) RH: ± 3 % (20 - 80% RH) and ± 5 % (0 - 100% RH)				
Analog Output Type	4-20 mA or 0-10 V	-	4-20 mA or 0-10 V		-
Advanced Functions	Dew point retransmission	Dew point indication	Dew point retransmission		Battery level dew point indication
Communication	Through TxConfig adapter	RS485 Modbus RTU	Through TxConfig adapter		USB mini-B type NOVUS Air (IEEE 802.15.4)
Approvals	CE				Anatel (0172-13-7089) FCC and CE
Operating Conditions (Housing)	-10 to 65 °C (14 to 149 °F) 0 to 95% RH	-40 to 70 °C (-40 to 150 °F) 0 to 95% RH	-10 to 65 °C (14 to 149 °F) 0 to 95% RH		-10 to 70 °C (14 to 158 °F) 0 to 95% RH
Power Supply	12-30 Vdc (18-30 Vdc)	12-30 Vdc	12-30 Vdc (18-30 Vdc)		12-30 Vdc or Replaceable 3.6 V Lithium battery
Ingress Protection	Housing: IP65 Probe: IP40				IP40



## High Accuracy Relative Humidity and Temperature Transmitter

**RHT Climate** relative humidity and temperature transmitter provides highly accurate and stable measurements and transmits both signals via two independent analog outputs and the RS485 Modbus RTU communication. The **RHT Climate** is fully USB configurable through its free **NXperience** software which also performs diagnostics and input/output simulation, installation and commissioning tasks.

**RHT Climate** is available with or without LCD display for duct or wall mounting with different probe lengths.

- High accuracy measurement
- Large display with backlight
- Configurable analog outputs
- Configuration via USB or front keys
- Alarm outputs and buzzer



**RHT Climate**

### Duct Mounting



RHT Climate WM	RHT Climate WM LCD	RHT DM	RHT DM 485 LCD	RHT Climate DM	RHT Climate DM LCD
Integrated RHT probe		Integrated RHT probe (options: 150, 250, and 400 mm)			
Temperature: -40 to 60 °C (-40 to 140 °F) Humidity: 0 to 100% RH		Temperature: -40 to 120 °C (-40 to 248 °F) Humidity: 0 to 100% RH	Temperature: -40 to 100 °C (-40 to 212 °F) Humidity: 0 to 100% RH		
Temperature: ± 0.2 K (0 to 60 °C) (32 to 140 °F); Humidity: ± 1.8 % RH and 23 °C (0 - 90 % RH)		Temperature: ± 2 °C (3.6 °F) RH: ± 3 % (20 - 80% RH) and ± 5 % (0 - 100% RH)	Temperature: ± 2 °C (3.6 °F) RH: ± 3 % (20 - 80% RH) and ± 5 % (0 - 100% RH)	Temperature: ± 0.2 K (0 to 60 °C) (32 to 140°F); Humidity: ± 1.8 % RH and 23 °C (0 - 90 % RH)	
4-20 mA or 0-10 V (10-0 V)		4-20 mA	-	4-20 mA or 0-10 V (10-0 V)	
Psychrometric properties, alarm buzzer, 2 digital outputs, maximum and minimum values, simulation of inputs, simulation of outputs, custom calibration and front keys (LCD version only)		Dew point retransmission	Dew point indication	Psychrometric properties, alarm buzzer, 2 digital outputs, maximum and minimum values, simulation of inputs, simulation of outputs, custom calibration and front keys (LCD version only)	
USB Micro-B Type and RS485 Modbus RTU		Through the TxConfig adapter	RS485 Modbus RTU	USB Micro-B Type and RS485 Modbus RTU	
CE		CE			
-40 to 60 °C (-40 to 140 °F) 0 to 95% RH		-10 to 65 °C (14 to 149 °F) 0 to 95% RH	-40 to 70 °C (-40 to 158 °F) 0 to 95% RH	-40 to 60 °C (-40 to 140 °F) 0 to 95% RH	
12-30 Vdc		12-30 Vdc (18-30 Vdc)	12-30 Vdc		
Housing: IP65 Probe: IP30 or IP40		Housing: IP65 Probe: IP40			Housing: IP65 Probe: IP30 or IP40