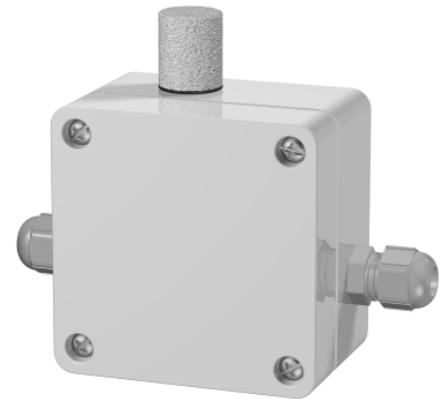## RH/T Probe with RS485 Interface RHW

- ♦ **Low cost**
- ♦ **RH and temperature conversion**
- ♦ **RS485 isolated interface**
- ♦ **Up to 32 probes in a network**
- ♦ **Optional stainless steel sintered filter**
- ♦ **IP65 protection**

COMECO's HVAC humidity probe RHW has the same features as the RHV model but with RS485 output and is designed specially for multi-point measurement and data acquisition in a network with up to 32 devices. Using a thin-film sensor, whose capacitance varies proportionally to medium relative humidity, and a thin-film temperature sensor, the probe measures relative humidity and temperature of air and non-aggressive gases at atmospheric pressure, and transforms it into information sent via standard RS485 interface with ACSII protocol. RHW is equipped with a convenient plastic enclosure with IP65 and two PG7 cable glands for easy and fast network building. This model can be optionally equipped with a stainless steel sintered filter for sensor protection. Thanks to its robust design, network communication potential, and low price, the RHW transmitter can be widely used in HVAC building automation and warehouse control systems.

Technical specifications

Input

Humidity	capacitive sensor, 0...100 %RH
Temperature	Pt100 (w=1.385), -20...60 °C
Isolation from output / supply	1500 VAC for 1 min

Output / Interface

Interface type	RS485
Function	configuration and networking
Network devices	up to 32
Format	8 (data) + 1 (stop), even parity
Baud rate	1200 / 2400 / 4800 / 9600 bps
Isolation from input	1500 VAC for 1 min

Power supply

Supply voltage	5 VDC ± 5%
Admissible variations	0.2 Vp-p at 50 Hz
Consumption	max. 100 mA

[1] Can be mounted on a wall through 2 holes ø3.8 mm in the enclosure back wall

Accuracy

RH measurement error	≤ 2.0% from span
Temperature measurement error	≤ 0.4% from span
Temperature drift for RH	0.05% from span for 1 °C
Temperature drift for temperature	0.01% from span for 1 °C

Operating conditions

Ambient temperature	-20...60 °C
Ambient humidity	0...95 %RH, non-condensing

Design and materials

Case material	plastic
Sensor protection	plastic cap with stainless steel mesh
Sintered filter (option)	stainless steel, 75 µm
Mounting	free [1]
Wiring	screw terminals inside housing
Dimensions	108x83x40 mm
Weight	max. 150 g
Protection class	IP65

Ordering code RHW - #1

Code	Feature or option	Code values
#1	Sintered filter	**X** - none, **S** - sintered filter mounted