

HMW60/70 Humidity and Temperature Transmitters for wall mounting in HVAC applications



Vaisala HUMICAP® Humidity and Temperature Transmitters HMW60 and HMW70 are designed for use in air conditioning applications where accurate and stable control of relative humidity and temperature are required.

Features/Benefits

- Accuracy up to ± 2 %RH
- True two-wire transmitters with 4 ... 20 mA loop powered output (HMW60)
- Selectable signal output of 0 ... 1 V, 0 ... 5 V or 0 ... 10 V (HMW70)
- Vaisala HUMICAP® Sensor for excellent accuracy and long-term stability, negligible hysteresis and resistance to dust and most chemicals.
- Temperature compensated
- Also available as temperature-only transmitters HMW 60T/70T
- NIST traceable (certificate included)

The wall mounted Vaisala HUMICAP® Humidity and Temperature Transmitters HMW60 and HMW70 are designed for monitoring relative humidity and temperature in building energy management systems. The combination of high accuracy, stability and reliable operation, make these products the ideal choice for demanding applications.

Measures both humidity and temperature

The HMW60 and HMW70 transmitters are available in three models: U for humidity measurement-only,

Y for humidity and temperature measurement, and T for temperature only.

Fast, on-site calibration

The accuracy of the transmitters is simple to check using either the Vaisala HUMICAP® Hand-Held Humidity and Temperature Meter HM70 or the Vaisala HUMICAP® Humidity Indicator HMI41. The calibration can be done in seconds with a single potentiometer without disturbing the operation, resulting in great savings both in maintenance time and costs.

Technical data

60 series: 2-wire, 4 to 20 mA output

Wall mount	RH only	HMW60U
	RH & T	HMW60Y
	T only	HMW60T

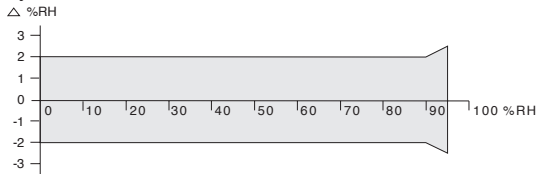
70 series: 3-wire, variable voltage output

Wall mount	RH only	HMW70U
	RH & T	HMW70Y
	T only	HMW70T

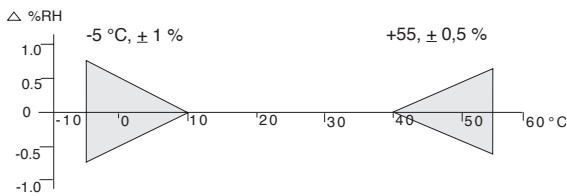
Relative humidity

Measurement range 0 ... 95 %RH*

Accuracy at +20 °C



Temperature dependence



Response time at +20 °C (+68 °F), 90 % response 15 s

Stability ±2 % RH / 2 years

Sensor HUMICAP® 180

* Output signal corresponds to 0 ... 100 %RH

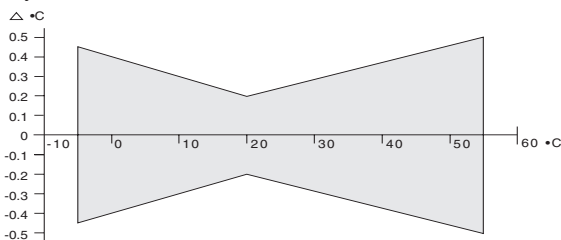
Temperature (Y and T models)

Linearity better than 0.1 °C

Sensor Pt 1000 IEC 751 class B

Measurement range -5 ... +55 °C (+23 ... 131 °F) **

Accuracy¹



** Optional temperature scales are available on request.

General - 60 series

Supply voltage	10 ... 35 VDC (RL = 0 ohm)
	20 ... 35 VDC (RL = 500 ohm)
Output signal	4 ... 20 mA

General - 70 series

Supply voltage range depends on the selected output signal		
	DC	AC
0 ... 1V	10 ... 35 V	9 ... 24 V
0 ... 5V	14 ... 35 V	12 ... 24 V
0 ... 10V	19 ... 35 V	16 ... 24 V
Power consumption @ 24 VAC		
	HMW70U	10 mA typical
	HMW70Y	12 mA typical

General

Operating temperature range	
electronics	-5 ... +55 °C (+23 ... +131 °F)
Storage temperature range	
	-40 ... +80 °C (-40 ... +176 °F)
Long-term humidity range for electronics	
	0 ... 85 %RH
Housing material	
	ABS plastic
IP Class 30	
Fire resistance	
	UL94-HB
Colour	
	NCS-2502-R
Connections	
	screw terminals 0.5 ... 1.5 mm ²

Complies with EMC standard EN61326 and EN55022