

## Vaisala INTERCAP® Humidity and Temperature Transmitter Series HMW80



*The HMW80 combines excellent stability with easy installation and reliable operation.*

### Features/Benefits

- Cost-efficient, dependable solution for humidity and temperature measurement for heating and ventilation
- Measurement range 0 ... 100 %RH and -5 ... +55 °C
- Stable and dependable
- Combines excellent stability with easy installation and reliable operation
- Fits EU/US/JPN junction boxes
- 2-year warranty
- No recalibration required
- UL-V0 approved materials used

The two- and three-wire Vaisala INTERCAP® Humidity and Temperature Transmitter Series HMW80 is designed for use in energy management systems in buildings. They combine excellent stability with reliable operation. The HMW80 is easy to install: wire it to the terminal block at the transmitter bottom and close the housing with a snap-on lid to cover the electronics.

### Low Maintenance Costs

The HMW80 humidity transmitters use the Vaisala INTERCAP® Sensor – an interchangeable capacitive humidity sensor. The transmitters require no recalibration if the sensor is changed. This means great savings in overall maintenance costs. The sensor is also insensitive to dust as well as to most chemicals.

### Measures Both Humidity and Temperature

The HMW80 transmitters are available in four models: HMW82 and HMW83 transmitters measure both humidity and temperature. They measure humidity with a  $\pm 3$  %RH accuracy and with a stability of  $\pm 3$  %RH over 5 years. The accuracy of the temperature measurement is  $\pm 0.5$  °C. Two other models, TMW82 and TMW83, measure temperature only.

Both 2- and 3-wire transmitters are also available: HMW82 and TMW82 are 2-wire (4 ... 20 mA loop powered) transmitters, and HMW83 and TMW83 are 3-wire (0 ... 10 V) transmitters.

# Technical Data

## Performance

### RELATIVE HUMIDITY

Measurement range 0 ... 100 %RH

#### Accuracy

Temperature range 10 ... 30 °C

30 ... 70 %RH ±3 %RH

0 ... 30 %RH, 70 ... 100 %RH ±5 %RH

Temperature range -5 ... +10 °C, +30 ... +55 °C

0 ... 100 %RH ±7 %RH

Stability ±3 %RH / 5 years

Humidity sensor Vaisala Intercap®

### TEMPERATURE

Measurement range -5 ... +55 °C

#### Accuracy

+10 ... +30 °C ±0.5 °C

-5 ... +10 °C, +30 ... +55 °C ±1.0 °C

Temperature sensor Digital temperature sensor

## Operating environment

Operating temperature range -5 ... +55 °C

Storage temperature range -40 ... +60 °C

Electromagnetic compliance complies with EMC standard EN61326-1, Light industrial Environment

## Inputs and outputs

### HMW82, TMW82

Outputs 4 ... 20mA, loop powered

Loop resistance 0 ... 500 Ohm

Supply voltage 10 ... 28VDC

### HMW83, TMW83

Outputs 0 ... 10V

Load resistance 10 kohm min

Supply voltage 15 ... 35VDC / 24VAC ±20 %

## Mechanics

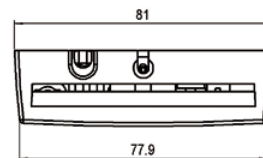
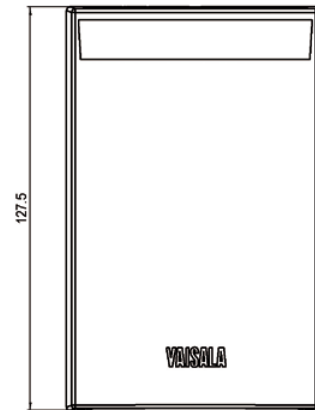
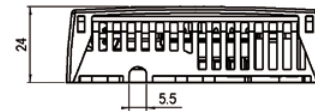
IP class IP30

Housing colour RAL9003

Housing material ABS/PC

UL-V0 approved

## Dimensions



For more information, visit [www.vaisala.com](http://www.vaisala.com) or contact us at [sales@vaisala.com](mailto:sales@vaisala.com)

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