

HMW80 product presentation



VAISALA

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- HMW80 main features and specifications
- Product comparison

HVAC wall transmitters

RH&T - HMW80, T only - TMW80

Vaisala INTERCAP® Humidity and temperature transmitter
HMW82/HMW83

Vaisala Temperature transmitter
TMW82/TMW83



Features:

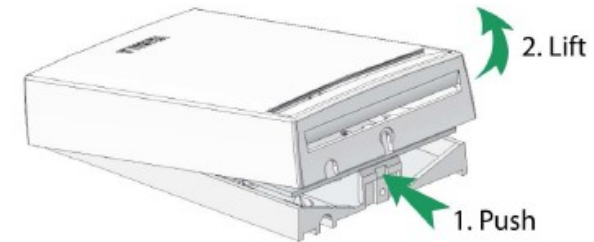
- No selections or configurations. Four different types:
 - TMW82 : 4..20mA T- only
 - TMW83: 0...10V T – only
 - HMW82: 2x floating 4...20mA RH+T
 - HMW83: 2x 0...10V RH+T
- Only functional check, no calibration certificate.
- No user interface, no adjustment possibility

The benefits:

- Easy installation, no configuration
- Combines excellent stability with easy installation and reliable operation
- Cost-efficient, dependable solution for humidity and temperature measurement for heating and ventilation

HMW80 features continued

- Easy to mount due to terminal block on bottom. Do wiring first with just enclosure bottoms, attach lids later.
- Measurement range/output scale:
 - 0 ... 100%RH
 - -5... 55°C °C
- UL V0 materials used in enclosure
- IP30 127x82x25 mm enclosure
- Fits EU/US/Japan junction box
- 2 years warranty
- **No user manual, quick guide or other papers in the delivery. Basic (how to open) instructions printed on the delivery box.**



Specifications

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

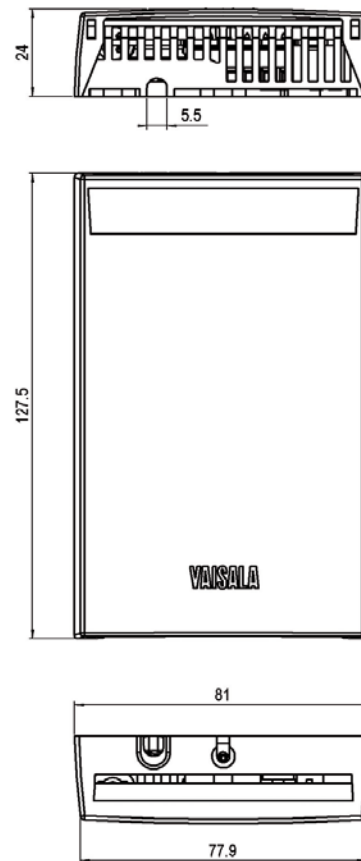
Accuracy

+10 ... +30 °C ±0.5 °C

-5 ... +10 °C, +30 ... +55 °C ±1.0 °C

Temperature sensor Digital temperature sensor

Dimensions



A RH&T wall sensor that actually measures ambient temperature and RH

- High power output often distorts Temperature and Relative humidity measurements in wall sensors.
- This selfheating increases the temperature reading and decreases the humidity reading of the device
- Problems are especially bad in 4...20mA devices where power consumption can reach $2 \times 20\text{mA} \times 28\text{V} = 1120 \text{ mW}$
- In the HMW80-series this selfheating effect has been reduced using thermal modelling and testing to 0.3°C even in worst-case conditions.

