HMW80 product presentation

VAISALA

Contents

- 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:

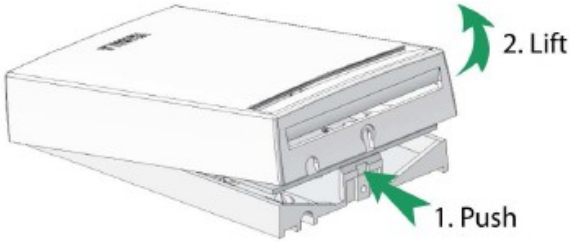
•Easy installation, no configuration

•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

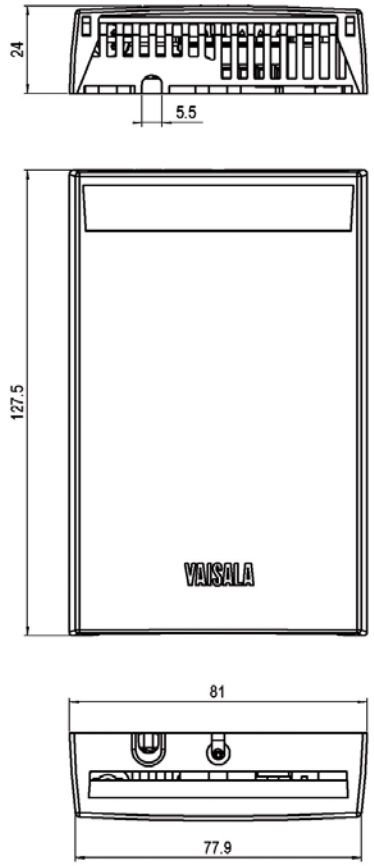
- Easy to mount due to terminal block on bottom. Do wiring first with just enclosure bottoms, attach lids later.
- Measurement range/output scale:
  - 0 ... 100%RH
  - -5... 55°C °C
- UL V0 materials used in enclosure
- IP30 127x82x25 mm enclosure
- Fits EU/US/Japan junction box
- 2 years warranty
- **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 x 20mA x 28V = 1120 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.