Unrivalled PERFORMANCE
Accurate measurements are essential for healthy indoor air and improving the energy efficiency of buildings. Sensors and transmitters from Vaisala are renowned for their unrivalled performance, reliable results, and low total cost of ownership.

Healthy and SUSTAINABLE
The unique, cutting edge Vaisala sensor technologies are manifested throughout our versatile range of products. The transmitters have an exceptionally long lifetime and excellent measurement stability, thus being practically maintenance free. These are among the many reasons why Vaisala’s products are a sustainable choice.

EXCELLENCE IN MEASUREMENTS

For cutting-edge SOLUTIONS
Our selection of temperature, humidity and carbon dioxide transmitters are perfect for HVAC monitoring and controls, such as building automation systems, demand-controlled ventilation and building management systems.

5-year WARRANTY
We are confident in the lasting quality and long lifetime of our measurement instruments. We are offering a standard warranty period of five years on our transmitters for building automation.

5-YEAR WARRANTY ON SELECTED HVAC TRANSMITTERS
Vaisala’s high-quality, reliable measurement instruments offer an exceptionally long lifetime, need minimal maintenance, and provide excellent measurement stability. This makes them the ideal choice for reliable HVAC control. Our transmitters for building automation are covered by 5-year warranty.

See all warranty terms: www.vaisala.com/warranty
The secret of the long lifetime of our transmitters: The winning combination of unique measurement technology and careful future-proof design of instruments. These products with exceptionally long lifetime and excellent measurement stability are practically maintenance free, and a sustainable choice.

HMW90 Series
Humidity and Temperature Transmitters

TMW90 Series
Temperature Transmitters

GMW90 Series
Carbon Dioxide, Humidity and Temperature Transmitters

**INSTALLATION**
Wall-mount

**OUTPUT PARAMETERS**
- Relative humidity
- Temperature
- Dew point / frost point temperature
- Wet bulb temperature
- Enthalpy
- Mixing ratio
- Absolute humidity
- Dew point depression

**OUTPUT OPTIONS**
- 4…20 mA loop powered
- 0…5/0…10 V, optional relay
- Modbus RTU

**DETAILS**
- IP30 enclosure
- Display option
- Optional decorative covers
- User exchangeable measurement modules available
- Accuracy ±1.7% Rh, ±0.2°C (±0.36 °F)
- Calibration certificate included

The general purpose HVAC transmitters are renowned for their long lifetime and low total cost of ownership, their reliability and negligible maintenance needs throughout the product life cycle.

HMW82/83
Humidity and Temperature Transmitters

TMW82
Temperature Transmitters

GMW83/84/86
Carbon Dioxide, Humidity and Temperature Transmitters

**INSTALLATION**
Wall-mount

**OUTPUT PARAMETERS**
- Relative humidity
- Temperature
- Carbon dioxide
- Relative humidity
- Temperature
- Dew point/frost point temperature
- Wet bulb temperature
- Enthalpy
- Mixing ratio
- Absolute humidity
- Dew point depression

**OUTPUT OPTIONS**
- 4…20 mA loop powered
- 0…10 V
- 0…5/0…10 V
- Modbus RTU

**DETAILS**
- IP30 enclosure
- Display option
- Optional decorative covers
- User exchangeable measurement modules available
- Accuracy ±3% Rh, ±0.5 °C (±0.9 °F)
- Calibration certificate included

Watch the installation and calibration video of the HMW90 series to learn how easy it is: [www.vaisala.com/HMW90](http://www.vaisala.com/HMW90)
The unique, cutting-edge Vaisala sensor technologies are manifested throughout our versatile range of products. The measurement technology is known for superior performance even in challenging environments. Prestigious for unrivalled performance and reliability, our sensors and transmitters stand out for low total cost of ownership.

**UNIQUE SENSOR TECHNOLOGY INSIDE**

The unique, cutting-edge Vaisala sensor technologies are manifested throughout our versatile range of products. Accuracy and long-term stability of Vaisala sensors is absolutely the best of class within the industry. When it comes to reliable measurements, Vaisala products are in the league of their own.
When reliability matters, the measurements matter. Maintaining as-designed indoor conditions with minimized consumption of energy requires precision and reliability in every piece in the chain. Although influenced by many variables, eventually the control of your HVAC systems can be only as precise as your measurements are.
Vaisala as a global leader in environmental and industrial measurements offers a unique selection of indoor and outdoor instruments for HVAC applications. The versatile outdoor and weather instruments provide the best possible information on prevailing outdoor conditions.

### OUTDOOR AND WEATHER TRANSMITTERS

For all HVAC applications

### HANDHELD METERS

For spot-checking and calibration

<table>
<thead>
<tr>
<th>Vaisala Indigo80 Handheld Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual-probe, high-accuracy portable diagnostics and data logging tool. Log up to a month’s worth of measurement data.</td>
</tr>
<tr>
<td>Industry standard USB-C interface for data uploads and battery charging. Lithium-ion battery provides a typical operation time of 10 hours.</td>
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</table>

#### FEATURES

- **Indigo80 Handheld Indicator**
  - Dual-probe, high-accuracy portable diagnostics and data logging tool. Log up to a month’s worth of measurement data.
  - Industry standard USB-C interface for data uploads and battery charging. Lithium-ion battery provides a typical operation time of 10 hours.
  - Robust, durable aluminum body is resistant to chemicals and dust.
  - Multilingual, menu-based user interface available in 10 languages. View live measurement data as numbers or graphs.
  - Intuitive user interface that guides the user if needed. Designed to be easy to use.

### HMS110 Series Humidity and Temperature Transmitters

- **HMS82/83 & TMS82/83 Humidity and Temperature Transmitters**
- **GMP252 Carbon Dioxide Probe with DTR250 Radiation Shield**
- **WXT530 Series Weather Transmitters**

#### INSTALLATION

- Outdoor model with integrated radiation shield
- Outdoor model with integrated radiation shield
- Outdoor model with integrated radiation shield
- Outdoor model with integrated radiation shield

#### OUTPUT PARAMETERS

- Relative humidity
- Temperature
- Dew point temperature
- Wet bulb temperature
- Enthalpy
- Relative humidity
- Temperature
- Dew point temperature
- Wet bulb temperature
- Enthalpy
- Carbon dioxide
- Air pressure
- Temperature
- Humidity
- Rainfall
- Wind speed
- Wind direction

#### OUTPUT OPTIONS

- 4…20 mA
- 0…10 V
- Modbus RTU
- 4…20 mA
- 0…10 V
- Modbus RTU
- 4…20 mA
- 0…10 V
- Modbus RTU

#### DETAILS

- Ingress protection IP65
  - Accuracy ±2% Rh, ±0.2 °C (±0.36 °F)
  - Calibration certificate included
- Ingress protection IP65
  - Accuracy ±3% Rh, ±0.3 °C (±0.54 °F)
- CO₂ measurement ranges:
  - 0...2000 ppm
  - 0...3000 ppm
  - 0...5000 ppm
  - Accuracy ±0.5 ppm, ±0.3 °C (±0.54 °F), ±3% Rh, ±3% at 10 m/s

#### OPERATING ENVIRONMENT

- Temperature -20 ... +50 °C (-4 ... +122 °F)
- Humidity 20 ... 85 %RH, when Ta ≤ +40 °C (+104 °F)

#### MAX. NUMBER OF CONNECTED PROBES

- 2

#### DATA LOGGING CAPACITY

- Up to 5.5 million real-time data values

#### LOGGING INTERVAL

- 1 s ... 12 h

#### LOGGING DURATION

- 1 min ... memory full

#### ALARM

- Audible alarm function

#### SUPPORTED LANGUAGES

- English, Chinese, Finnish, French, German, Italian, Japanese, Portuguese, Spanish, Swedish

#### READ MORE

- DATA SHEET
- Vaisala.com
COMMERCIAL BUILDINGS

A reliable measurement system is essential to a commercial building’s success. Buildings in the commercial sector are expected to be energy efficient and environmentally friendly, as well as comfortable and healthy indoor environments. It is critical to have instruments that have a high degree of reliability and minimal drifting, which reduces the maintenance requirements and ensures that the building systems are operating optimally.

MANUFACTURING & INDUSTRIAL FACILITIES

Manufacturing facilities and industrial facilities require high standards for measurements. Optimizing processes through precisely controlled indoor environments will increase efficiency and eliminate waste and variation. It is necessary to have high-quality HVAC sensors in special spaces, such as clean rooms or labs, as well as throughout the facility and its control room.

DATA CENTERS & MISSION-CRITICAL BUILDINGS

HVAC sensors play a crucial role in successful building system chain management. Energy consumption and efficiency can be significantly improved in mission-critical buildings like data centers with these small instruments. The reliability of measurements contributes to the trustworthiness of building systems controls, data halls, and control rooms.
ABOUT VAISALA

Global coverage with LOCAL PRESENCE

As a global leader in industrial, weather and environmental measurements, we provide reliable, accurate and innovative products and solutions that enabling better decision-making, increased productivity, and improved safety and quality.

Customers all over the world and in a multitude of industries use our measurement solutions. Everywhere from forecasting weather and making sure it is safe for your flight to take off, to staying ahead of power outages or monitoring incubators for premature children in hospitals, you can find Vaisala’s premium measurement solutions in action all over the world.

Find your local contact

Vaisala’s premium measurement solutions enhance safety, efficiency, and decision-making – for a sustainable future on our planet. The heart of Vaisala’s sustainability lies in the positive impact of our products, as they help our customers, for example, to increase energy efficiency and reduce emissions.

Available ONLINE 24/7

Our products are easily available, any time, through the Vaisala Online Store. We have fast deliveries on all new instrument as well as spare part online orders. All instruments are made to order and calibrated just before shipment.

store.vaisala.com

Free shipping
Fast, free deliveries on all new instrument & spare part online orders

Safe Payment
Easy and secure payments options

Calibration
All instruments are made to order and calibrated just before shipment