Sensors and transmitters for data centers

Catalogue
Excellence in measurements

When reliability matters, the measurements matter. Creation of as-designed indoor conditions with minimized consumption of energy is not an easy task. It requires precision and reliability in every piece in the chain. Although influenced by many variables, eventually the control of your HVAC processes can be only as precise as your measurements are. Measurements of humidity, temperature, and other crucial parameters both indoors and outdoors, are among the key contributors to precisely controlled indoor environment.

Vaisala is a global leader in environmental and industrial measurements. As the trusted provider of measurement instruments, we offer you peace of mind. You can rest assured that our measurement devices will enable the highest precision and reliability for your controlled processes.

Let us introduce our signature collections of high-quality instruments for data centers, for your convenience.

» How much can measurement accuracy impact on cooling energy consumption? Download our free insider’s guide to know more!
Selection for data centers

Vaisala’s offering is a unique combination of outstanding outdoor and indoor measurement instruments. Our selection brings together world-renowned weather and outdoor transmitters and the top-quality measurement instruments used in monitoring and control of indoor environments.

Measurements in data centers must not fail. Sensors and transmitters of Vaisala are prestigious for their unrivalled performance and reliability, enabling precise and trustworthy controls of HVAC systems.

How continuity is enabled in data centers with Vaisala sensors? Read the blog post to learn more.
When the highest possible quality and reliability is required, we have the perfect solution for you. This is the new “de facto” selection for data centers applying the highest standards.

The selection brings together the most essential high-precision measurement instruments designed for critical environments. The products come with uniquely excellent accuracy, reliability and long-term stability of measurement.

Read more about the Indigo ecosystem and the interchangeable measurement probes.
We are pleased to introduce our world-class repertoire of high-accuracy transmitters, complementing the building automation system even in the most demanding indoor environments and their control needs.

Vaisala’s measurement instruments are the perfect fit for data centers with reliability as a priority, and within a reasonable budget.

The products come with excellent long-term stability of measurement, which ensures accuracy of measurement and precise controls also in the long term.

**Precision with streamlined features**

**HMT120/130** Humidity and Temperature Transmitter, Multipurpose
- Accuracy: ±1% RH, ±0.1 °C (±0.18 °F)
- Outputs: 4-20 mA, 0-10 V
- Exchangeable measurement probes
- IP65 enclosure, optional display
- Ideal for demanding conditions and processes

**TMT120/130** Temperature Transmitter, Multipurpose
- Accuracy: ±0.1 °C (±0.18 °F)
- Outputs: 4-20 mA, 0-10 V
- Exchangeable measurement probes
- IP65 enclosure, optional display
- Ideal for demanding conditions and processes

**HMD110** Duct Humidity and Temperature Transmitter
- Accuracy: ±2% RH, ±0.2 °C (±0.36 °F)
- Outputs: 4-20 mA, Modbus RTU
- IP65 enclosure, optional display
- Durable design, easy to install

**TMD110** Duct Temperature Transmitter
- Accuracy: ±0.2 °C (±0.36 °F)
- Outputs: 4-20 mA, Modbus RTU
- IP65 enclosure, optional display
- Durable design, easy to install

**TMI110** Immersion Temperature Transmitter
- Accuracy: ±0.1 °C (±0.18 °F)
- Outputs: 4-20 mA, Modbus RTU
- Installed in a thermowell
- Precise measurement of liquids
- Very fast response time

**HMW90** Room Humidity and Temperature Transmitter
- Accuracy: ±1% RH, ±0.1 °C (±0.18 °F)
- Outputs: 4-20 mA, 0-10 V
- Modbus RTU
- Exchangeable measurement modules
- Display with sliding cover

**PDT101** Differential Pressure Transmitter
- Accuracy: ±0.1 % / ±1 % of span
- Outputs: 4-20 mA, 0-5 V, 0-10 V
- Unidirectional/bidirectional options
- Optional pressure ranges
- Easy mounting

**TMD90** Room Temperature Transmitter
- Accuracy: ±0.2 °C (±0.36 °F)
- Outputs: 4-20 mA, 0-10 V
- Exchangeable measurement modules
- Display with sliding cover

**TMD110** Duct Temperature Transmitter
- Accuracy: ±0.2 °C (±0.36 °F)
- Outputs: 4-20 mA, Modbus RTU
- IP65 enclosure, optional display
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**TMI110** Immersion Temperature Transmitter
- Accuracy: ±0.1 °C (±0.18 °F)
- Outputs: 4-20 mA, Modbus RTU
- Installed in a thermowell
- Precise measurement of liquids
- Very fast response time
When the space is limited, the miniature-size measurement probes form a compact solution for critical sites. Probes are connected through Modbus RTU and can be daisy-chained for easy installation.

Optional accessories are also available for convenience, including magnetic probe attachment units and plug & play cables of various lengths, with standard M8 quick connectors.

Miniature-size measurement probes area compact solution for critical sites. Read more about Vaisala’s humidity sensors.

HMP110 | HMP110T
Humidity and Temperature Probe
- Accuracy ±1.5% RH, ±0.1 °C (±0.18 °F)
- Ideal for rough conditions
- IP66 metal housing
- High chemical tolerance
- Excellent measurement stability
- Length 71 mm (2.8 in), diameter 12 mm (0.47 in)

HMP113
Humidity and Temperature Probe
- Accuracy ±1.5% RH, ±0.1 °C (±0.18 °F)
- Fast thermal response time
- IP54 plastic enclosure
- High chemical tolerance
- Excellent measurement stability
- Length 71 mm (2.8 in), diameter 12 mm (0.47 in)

Sustainability in the heart of our business

Vaisala’s premium measurement solutions enhance safety, efficiency, and decisionmaking – 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.

Learn more about our sustainability.

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.