

HUMICAP® Humidity and Temperature Probe HMP155

Accuracy and reliability in even the most challenging environments



Key benefits

Excellent long-term stability

Engineered to withstand harsh environments, a solid probe structure protected by a sintered teflon filter gives the HMP155 maximum protection against chemicals, water, dust, and dirt. Compared to the HUMICAP® 180R, the new HUMICAP® R2 sensor is even more tolerant against corrosion.

Accurate data under any conditions

The HMP155 temperature measurement operates reliably under drastic temperature variations down to -80°C (-112°F). With warmed probe technology, HMP155 can measure humidity accurately even under condensing conditions and it also helps in reducing the chemical contamination and in minimizing drift.

Quality assurance and traceable calibration

Each HMP155 is adjusted and calibrated individually at the Vaisala factory, and applied references are SI-traceable. To ensure high accuracy over the whole measurement range, standard factory calibration is performed at six points covering humidity ranges from completely dry to nearly saturated conditions.

In high humidity climates where moisture is near saturation and in environments with changing temperatures, capturing accurate data is especially challenging. These are the types of conditions for which Vaisala's HUMICAP® Humidity and Temperature Probe HMP155 were specifically designed.

HMP155 Humidity and Temperature Probe provides fast, accurate humidity measurements across a range of conditions including tropical, coastal, and marine environments. Thanks to the warmed probe technology and latest generation HUMICAP® R2 sensor technology, the HMP155 delivers excellent long-term stability in the harshest environments, especially where measurements may be corrupted by chemicals, fog, mist, rain, and heavy dew.

HMP155 at a glance

Applications

- Logging humidity and temperature data at remote weather stations.
- Gathering continuous weather condition information for short- and long-term forecasting, meteorological analysis, and climate studies.
- Facilitating road safety reports and planning with weather condition monitoring.
- Monitoring conditions to predict potential impact of approaching storms on roadways and travel conditions.
- Supporting operational safety while maximizing productivity for highway maintenance and aviation operations.

Key features

Simple PC-based calibration using the unit's push buttons or with the MI70 indicator. Accessed via USB cable connection.

Weather-proof housing (IP66) that ensures continuous, safe data capture and reporting.

Flexible output choices that include Voltage, RS-485, resistive Pt100.

Optional warmed probe technology ensures accurate measurement and better long-term stability in high-condensing environments.

Optional chemical purge function regularly cleans the humidity sensor chip to reduce sensor drift caused by pollution-based chemical vapors — ideal for road and maritime installations.

Optional fast temperature probe for quicker, accurate temperature measurement. Compatible with liquid bath calibration.

Why Vaisala?

The industry standard in weather detection

Vaisala's surface weather solutions are built on nearly 50 years of industry leadership. Our technology's precision and ruggedness under the harshest conditions have been validated time and time again. Meteorological agencies around the world rely on Vaisala technology to improve forecasts and weather services with thousands of units deployed in more than 110 countries and even on Mars.

Support to count on

Look to Vaisala for dependable support, project capabilities, and training so you can get the most from your system. With decades of experience providing the best technologies and the finest support, Vaisala's philosophy of partnership is unmatched in the industry.

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