Ultrasonic Wind Sensor WMT700

VAISALA

Product Spotlight

Precise, maintenance-free wind measurement for turbine control

Accurate wind measurements are integral for efficient wind power generation. Something as small as an anemometer can make or break the performance and longevity of a massive wind turbine. Incorporating the accuracy and maintenance-free operation of ultrasonic wind sensing technology is an effective way to maximize power output, minimize downtime, and reduce maintenance costs, even inthe harsh environments of remote and offshore wind farms.



Key benefits

WINDCAP technology with ultrasonic wind sensors in a three-transducer layout delivers accurate, reliable, and redundant wind measurement data

Zero moving parts

Exceptional off-axis response

Extreme durability that is built and tested to withstand wind speeds exceeding 100 m/s (223 mph).

Optional thermostatically controlled heaters

Fully digitized signal processing

Optional bird prevention kit

Why Vaisala?

We are innovators, scientists, and discoverers who are helping fundamentally change how the world is powered. Vaisala elevates wind and solar customers around the globe so they can meet the greatest energy challenges of our time. Our pioneering approach reflects our priorities of thoughtful evolution in a time of change and extending our legacy of leadership.

Vaisala is the only company to offer 360° of weather intelligence for smarter renewable energy, nearly anywhere on the planet. Every solution benefits from our 85+ years of experience, deployments in 170+ countries, and unrivaled thought leadership.

Our innovation story, like the renewable energy story, continues.

Vaisala Ultrasonic Wind Sensor WMT700 delivers the highest measurement accuracy and greatest ongoing reliability for critical wind turbine applications.

The WMT700 is a robust, reliable ultrasonic anemometer that provides highly accurate wind speed and direction even under the extremely challenging conditions of both onshore and offshore wind farms. With no moving parts, its three-transducer design captures accurate data while minimizing angle of slope and vibration concerns.

The WMT700 is field proven and has been successfully deployed by professional meteorological agencies and wind energy producers in more than 100 countries. Optional heaters in the transducers, arms, and/or body prevent buildup of freezing rain, icing, and snow. No other wind sensor performs better and longer in the field.

Applications

- Efficient wind turbine control using realtime wind speed data even in the most ambitious site locations.
- Modernization of turbine control for optimized turbine performance and reliability.
- Proper turbine alignment to wind direction for optimized power output.
- Enabling proper attenuation to maximize output and reduce wear and tear on turbine drive trains.

