

# WINDCAP® Ultrasonic Wind Sensor WMT700

VAISALA

## Product Spotlight

### Providing trusted weather observations for a sustainable future

Get precise, maintenance-free  
wind measurement under almost  
any conditions

Accurate wind measurements are  
integral for meteorological modeling  
and reporting, but capturing this data  
can be difficult. Wind speeds are never  
constant from one second to the next.  
Snow and ice can interrupt wind  
measurement. Data can be thrown off  
by turbulence from complex terrain or  
air flow distortion due to surrounding  
structures and even precipitation.



## Key benefits

Zero moving parts removes under speeding and over speeding concerns often found in conventional mechanical wind sensors and eliminates mechanical failure-related data errors.

Exceptional off-axis response reduces the effects of turbulence for accurate measurements when mounted on moving platforms, in complex terrain, and other demanding applications.

Fully digitized signal processing and easy system integration, also supports digital and analog outputs from a single data port.

Optional bird prevention kit prevents measurement disturbances in locations where birds often perch.

Maritime DNV GL certified wind sensor.

## Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala provides trusted weather observations for a sustainable future. With over 85 years of experience and customers in 170+ countries, from the North and South Poles to Mars, we help provide the most reliable and accurate weather and climate information for better and safer daily lives.

Our instruments and intelligence are known as the gold standard for precision and reliability. As a sustainability leader we enable meteorology professionals to better understand, forecast and explain climate change. We continue to channel our curiosity into climate action and new ways of enabling a better planet for all.

Vaisala WINDCAP® Ultrasonic Wind Sensor WMT700 delivers the highest measurement accuracy in the harshest conditions, such as heavy precipitation, severe icing, and strong winds.

The WMT700 is a robust, reliable ultrasonic anemometer that provides surface wind measurement, which is WMO CIMO and ICAO-compliant. It is based on ultrasonic technology and time of flight measurement principles, which delivers highly accurate wind speed and direction information ranging from barely perceptible winds to extremely high gusts.

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

## Applications

- Measuring surface winds for weather forecasts, severe weather warnings, and climatological records.
- Studying current and seasonal storm conditions for research such as avalanche risk mitigation.
- Monitoring winds in road weather systems for travel safety and road closure determinations.
- Detecting wind shear to facilitate aviation safety.
- Monitoring wind speed and direction for wind turbine control.
- Gathering wind speed and direction information for ship navigation.

