

Vaisala Ultrasonic Wind Sensor WM80 for maritime applications

Product Spotlight

Reliable and accurate wind measurements are crucial for navigational safety and dynamic positioning.

In dynamic positioning applications – while stabilizing vessels during crew transfers or lifting operations – uninterrupted and reliable wind data reduces operational risks and improves safety. For navigation, the data underpins decision making surrounding potential route adjustments.

The Vaisala Ultrasonic Wind Sensor WM80 is designed for the demanding and harsh maritime environment, delivering world-class wind measurements to optimize your vessel performance.



Key benefits

Rely on the industry's most reliable wind measurements in all weather conditions.

Experience unmatched durability with easy installation in a user-friendly design.

Minimize the use of ship space.

Trust Vaisala's next generation ultrasonic wind measurement technology with world-class data availability and reliability.

Why Vaisala?

Weather and environmental insights are the greatest catalysts for successful maritime operations— from sensors to systems and digital services, Vaisala provides actionable insights that empower stakeholders to confidently meet challenges and harness new opportunities.

Our globally trusted maritime weather solutions enable remarkable efficiency gains, digital transformation, the protection of people and investments while supporting sustainable and responsible operations.

We are scientists and explorers driven by passion, relentless curiosity, and the desire to create a better world. Backed by nearly 90 years of unmatched scientific leadership, our solutions increase maritime weather awareness and drive innovation.

Reliable wind measurements, rugged design

The Ultrasonic Wind Sensor WM80 delivers reliable wind measurements in a robust design that fits right in with demanding, naturally corrosive offshore environments.

WM80 delivers unparalleled wind data availability across all weather conditions to enhance navigation and optimize dynamic positioning capabilities.

Crafted from corrosion-resistant, anodized marine-grade aluminum, it houses 11 controlled heaters allowing stable performance even in arctic environments. WM80 withstands freezing temperatures, heat, heavy precipitation, high winds, corrosion, vibration, and shock.

Ease of installation and use

The compact design of WM80 goes in tight spaces, and installation is straightforward. WM80 uses a convenient push-pull connector for secure and stable connection. The optional alignment tool helps to achieve precise sensor orientation for accurate wind direction information. WM80 is maintenance-free as there are no moving parts that wear, and no need for calibration.

Seamless integration adds to WM80's ease of use. Standardized communication protocol (NMEA and Modbus serial interface) facilitates easy sharing and integration of wind data to the control or navigation system of the vessel.

Trusted Vaisala technology for long-term use

WM80 uses patented Vaisala WINDCAP® ultrasonic wind measurement technology, which is based on more than 50 years of wind measurement expertise. Rugged WM80 builds on the patented Vaisala WINDCAP® technology, with a further signal boost from the new patented reflector, resulting in a 10-fold increase in signal level compared to conventional ultrasonic sensors. This allows uninterrupted and accurate wind measurements even in heavy rain or high wind speeds up to 90 m/s.

