

Maritime Observation System AWS830 for naval defense

Product Spotlight

Unparalleled precision in harsh seas

Naval defense operations demand unwavering accuracy, even in the harshest conditions. Adverse weather and challenging environments are the norm, making reliable weather and environmental monitoring an indispensable tool for ensuring operational efficiency and the safety of naval personnel.

The Vaisala Maritime Automatic Weather Station AWS830 is a next-generation automatic weather station meticulously designed for naval defense applications.



Key benefits

Enhanced crew safety and operational efficiency

Real-time weather and environmental data enables proactive safety decisions and reduces weather related delays.

Regulatory compliance and cost control

Maritime approved and compliant with relevant IEC and CAA standards with automated diagnostics that minimize maintenance.

Informed decision-making

Integrated sensors and Vaisala Elements Helideck Monitoring Software provide complete weather intelligence and real-time alerts.

Future-proof investment

Modular, cybersecure design adapts to evolving operational requirements.

AWS830 stands as a beacon of reliability in naval environments. The system is designed to withstand the salt, moisture, extreme temperatures, vibrations and impact shocks that are a daily part of working at sea.

It offers proven performance in extreme conditions, and is maritime approved and compliant with relevant IEC and CAA standards.

Additional sensors extend capabilities to wave monitoring, ocean current measurement, sea temperature, remote wind profiling, and lightning detection and weather forecasts through Vaisala Elements Helideck Monitoring Software. The system supports both Vaisala and third-party sensors, while automated diagnostic and data validation maintain high data availability.

AWS830 provides multi-sensor data gathering capabilities – wind speed and direction, barometric pressure, air temperature, relative humidity, visibility, cloud height, and helideck motion – empowering naval defense stakeholders with unparalleled insights. Its advanced elements helideck monitoring software offers real-time data display, reporting tools and warning alarms for better-informed decisions during critical weather situations.

Designed with a modular approach and built in cybersecurity, AWS830 makes it easy to integrate additional sensors and quickly replace individual components, minimizing downtime and overall operating costs. AWS830 incorporates robust cybersecurity features, including secure boot, signed firmware authentication, and end-to-end encrypted communication with Vaisala Elements Helideck Monitoring Software.

Naval defense applications

Effective coordination: Monitor air and sea conditions to coordinate supply vessels, helicopters, drones, and other operational support traffic effectively.

Early warning and safety protocols: Gather detailed offshore condition information to inform early warning and safety protocols, safeguarding naval personnel and assets.

Helideck stability: Provide accurate wind and helideck stability data to ensure safe airborne operations, vital for naval aviation.

Decision-making support: Monitor weather conditions to ensure safe naval operations.

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.

