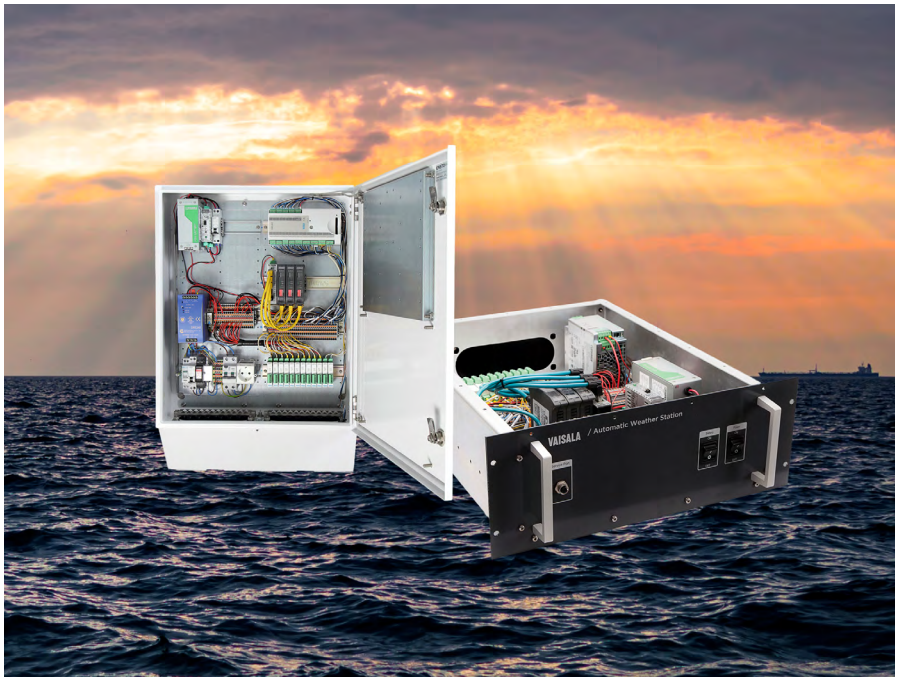
VAISALA

Product Spotlight

vaisala.com

Maritime Observation System AWS430

Offshore accuracy down to the last detail



Offshore maritime operations are demanding even in good weather, but as professionals know, adverse weather is normal on the sea and perfect conditions are a rare occurrence. The critical impact of weather and ocean conditions on offshore operations makes reliable environmental monitoring a vital tool for ensuring operational efficiency and crew safety.

Vaisala Maritime Observation System AWS430 is an automatic weather station designed for offshore maritime environments such as ships, FPSO vessels, and ocean platforms. With third-party sensor options that include oceanic observations, it provides the robust, real-time information necessary to make the complex weather and oceanic condition calculations required for safe, efficient offshore operations.

The system is also designed to withstand the salt, moisture, extreme temperatures, vibrations, and impact shocks that are a daily part of working at sea.

Key benefits

Detailed operational conditions information

AWS430 delivers a comprehensive, picture of current and approaching conditions using real-time oceanic, atmospheric, and storm data — helping you make critical safety decisions while maximizing your productivity.

Constant data availability

Built-in AWS430 algorithms continuously monitor sensor data and provide immediate alerts in case of a fault. For every parameter, minimum and maximum readings as well as step limits are automatically tested and cross-checked for accuracy and integrity of all data.

Flexible integration

The AWS430 system fully supports all NMEA and IEC requirements for data communication. Multiple connection ports allow easy sensor option customization to deliver the specific data your offshore operation needs. It can even be integrated into a ship's gyrocompass and navigation system to provide heading, speed, direction, and position for modeling and forecasts.

Designed for demanding maritime applications

All the components of the AWS430 system have been engineered to withstand the corrosive conditions, vibrations, and shocks as well as the freezing conditions experienced in extreme-weather environments that prevail aboard ships and offshore platforms. Test specifications comply with both the Lloyds' Register approval system and the IEC international maritime standard for applicable parts.

AWS430 at a glance

Applications

- Monitoring air and sea conditions for effective coordination of supply vessels, helicopters, and other operational support traffic.
- Gathering detailed offshore condition information to inform early warning and safety protocols.
- Providing accurate wind and helideck stability data to ensure safe airborne operations.
- Capturing weather and oceanic conditions to support offshore wind farm operations.
- Monitoring conditions to ensure safe offshore maintenance operations.

Key features

High-quality anti-corrosive construction in the equipment rack or waterproof outdoor enclosure units exceed Lloyd's Register, IEC, CAP, and NMEA requirements to ensure continuous operation and accurate data even under the harshest offshore conditions.

Multi-sensor data gathering that measures wind speed and direction (relative wind, true wind, upwind), atmospheric pressure, air temperature, and humidity.

Additional sensor options can be added to measure other parameters including water temperature, rain and sunshine duration, global and long wave radiation, precipitation amounts, cloud cover, visibility, tide, wave height and direction, salinity, water level, ocean current speed and direction, as well as helideck and ship motion.

Advanced operator software with a real-time data display, reporting tools, and warning alarms to enable better informed decisions during critical weather situations.

Modular design allows easy integration of additional sensors and quick replacement of individual components, which reduces downtime and overall operating cost.

Automated operation and self-diagnostics continuously collect all sensor data and perform data quality and sensor status check for superior reliability.

Why Vaisala?

Experience with perspective

Building on more than 80 years of experience, Vaisala has a unique understanding of weather measurement that has made Vaisala a trusted leader in maritime and aviation weather observation solutions. The technologies we offer are the result of our own R&D, and our solutions and services are used in environmental monitoring systems, helideck monitoring systems, and marine weather reporting worldwide. Our extensive expertise and global presence — with solutions in over 120 countries and all seven oceans — makes us your global maritime weather expert.

Support to count on

Look to Vaisala for dependable support, project capabilities and training so you can get the most from your system. To maximize the performance of Vaisala automatic weather stations, we provide project management, installation, training, acceptance testing, engineering, consulting, and ongoing service agreements. With decades of experience providing the best technologies and the finest support, Vaisala's philosophy of partnership is unmatched in the industry.

VAISALA

vaisala.com/maritime

Scan the code for more information

Ref. B212254EN-A