

Vaisala Beam Weather Station BWS500

Product Spotlight

Real-time, actionable wind and weather intelligence for improved port safety and efficiency

Climate change is bringing more frequent and extreme weather conditions, and ports are often the first to experience them. Accurate, real-time weather data is the key to achieving safe and efficient port operations in the face of storms, flooding and especially high winds.

Vaisala Beam Weather Station BWS500 provides reliable wind and weather data in a compact, scalable design for comprehensive coverage across the port area.



Key benefits

Accurate, high-quality data from proven, trusted Vaisala sensors

Turnkey end-to-end solution through Xweather Observe cloud service with user interface and APIs for precise weather & environmental monitoring

Compact, easy-to-deploy weather station suitable for localized and remote locations

A scalable platform that extends from a single, compact station to a network of connected stations

Remote access and service with secure data communication

Flexible power options that include solar and AC versatility

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 85+ years of unmatched scientific leadership, our solutions increase maritime weather awareness and drive innovation.

Beam Weather Station provides comprehensive weather data specific to your port, effectively filling observational gaps across the entire port area. Wind, visibility, air temperature, humidity and present weather data can be delivered directly either to external backend systems or Xweather Observe cloud services with a user interface and APIs for data visualization.

Easy to deploy standalone or as a scalable network, the end-to-end solution features open connectivity and data sharing options with state-of-the-art security to keep your data intact. With exceptional reliability, Beam Weather Station delivers strong ROI plus affordable cost of ownership.

Beam Weather Station delivers the real-time weather and environmental data needed to keep your port operations running safely and at peak efficiency.

Applications

- Ensuring safe operations while reducing the risks of damage to cranes, vessels and port structures
- Facilitating informed decision-making through seamless data sharing with third parties like vessels and integration into other systems
- Improving severe weather alerts and protocols to help minimize risk and maximize operations
- Supporting daily operational planning and quicker operational restarts after storms

