

Get the full picture

Ensure accurate weather observation data at every corner of ports

Today's extreme weather events affect different port operations in many ways. If extreme weather is not considered, ports can face extreme costs in many ways as well.



Personnel safety for port officers and operators of container yards, cranes, and trucks



Economic losses for terminal operators, shipping companies, carriers, and port authorities.



Maritime industry impacts, including port delays, closures, or reputational loss

Why are weather-related incidents still happening?

One of the biggest factors is the lack of high-quality weather data for decision-making. Without proper weather preparedness, individuals and teams lack the information needed to make timely decisions when extreme weather is on the rise. Other data-related reasons include:

1 Non-accurate wind data surrounding the port area

3 Controversial data sources

2 Lack of wind nowcasting availabilities

4 Weather data not utilized correctly

How to ensure weather data access throughout ports

Weather stations strategically placed in different locations throughout ports can provide hyperlocal weather data immediately. Combining several stations to create a comprehensive weather network is crucial to maintaining port operations.

Recommended weather station placement:

1 Onboard observation and forecast monitoring

2 Container terminal meteorological station

3 Terminal office observation and forecast monitoring



Recommended weather data to collect for the full picture:

- Wind
- Humidity
- Pressure
- Rainfall
- Temperature

Vaisala Beam Weather Station BWS500

A simple and affordable weather observation station that provides an economical and reliable way to get distributed, high-quality weather measurements. Beam Station provides immediate access to professional quality weather observation data — everywhere. The compact weather station provides best-in-class measurements for the 6 most critical factors for ports — all in one package.

What's in the station?



Cellular connectivity



BWS Cloud Companion

- Data cloud with observation data storage
- BWS Cloud Companion web application and data API

Supplementary professional services from Vaisala



Get access to hyperlocal weather data — immediately.

After the site is ready, installation and getting the Beam Station sensor online takes just about 15 minutes.

1. Prepare the installation site (pole, electricity)
2. Install the weather transmitter
3. Install the gateway and power supply unit
4. Connect the cables between the power supply, gateway, and weather transmitter
5. The data will be accessible online within minutes

