

# WindCube Scan Explore Edition

## Product Spotlight

### Long-range, 3D wind data for efficient, safe port operations

Ports are getting bigger, busier and more dense with cranes, buildings, containers and large ships. These structures interact with wind in complex ways, with different areas of a port often seeing dramatically different wind behavior. At the same time, seaports are often hit hardest by severe weather and wind is the most dangerous climate factor in port operations — becoming more so with climate change. These factors put today's ports at increased risk of injuries, delays and damages.



## Key benefits

Full 3D wind map with high data quality and range

Dedicated display software

Resistant to harsh weather conditions with minimal maintenance

API available for user's own configuration and data access

## 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.

Modern, laser-based weather sensors capture 3D spatial wind data for detailed situational awareness in every corner of complex port areas – making it an invaluable asset for understanding wind behaviors and patterns.

WindCube® Scan is the industry's tool of choice for maximizing safety, efficiency and operational continuity. By providing precise spatial wind data at ranges up to more than 10 km, WindCube Scan can create a virtual dome around the port area (the equivalent of thousands of anemometers) so you can measure, understand and act on current – and ever-changing – conditions.

## Applications

- Creating a virtual dome around port areas for expanded situational awareness and short-term forecasting
- Improving traffic management in ports by better understanding the spatial distribution of the wind field
- Enhancing the efficiency and safety of crane operations in ports
- Improving Dynamic Mooring Systems to prevent damage and ensure secure berthing

