

Global Lightning Detection Network (GLD360)

VAISALA

Product Spotlight

Accurate, actionable global lightning detection for maritime operations with the simplicity of a subscription

Vaisala Global Lightning Detection Network (GLD360), part of our Xweather family of subscription based products, delivers the most reliable, real-time lightning data available – with global coverage. Ideal for critical onshore and offshore maritime applications, it gives teams the accurate, actionable information they need to maintain safety and operational continuity.



Key benefits

Industry-leading detection and accuracy from a global array of advanced lightning sensors – capturing nearly all thunderstorms on Earth
Location accuracy of 1km and detection of more than 2 billion events each year.

Real-time data availability (30-second latency)

Flexible data delivery with web-based software supporting automated warnings, or via a real-time data-feed and API; allows for simple integration into existing weather platforms.

A single source for coverage that captures detailed lightning data for even the most remote onshore and offshore locations and lets you access it when and where you need it.

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.

Vaisala GLD360 is fed by a worldwide network of advanced sensors that detect lightning wherever it occurs, on land or in the middle of the sea. Its unmatched detection efficiency and industry-leading location accuracy can detect thunderstorms, track their trajectory and intensity, and support hazardous weather warnings – well beyond the range of radars, standalone sensors, and independent weather networks.

The result is outstanding value across a range of maritime applications, from offshore wind energy development and operation to port management, shipping, and helideck operations. GLD360 data is compatible with most weather monitoring and storm alert systems, including Vaisala Thunderstorm Manager, so maritime operators and port authorities can easily incorporate it into their daily operations.

Applications:

- Offshore platform/substation operations, equipment, or personnel transfer
- Wind farm installation, maintenance, and Wind Turbine Installation Vessel (WTIV) transport operations
- Helipad operations and transportation safety
- Lifting operations, crew exchanges, cargo transfer
- Post-event damage or fire investigations, historical assessments
- Port or near-shore industrial operations, safety protocols, and planning

