

Vaisala Present Weather and Visibility Sensors PWD Series

VAISALA

Product Spotlight

The right visibility data for maritime use, at the right price

The visibility at sea depends on many factors, such as humidity, wind speed, temperature, and precipitation. It may sound simple, but any meteorologist will tell you that visibility is one of the hardest parameters to accurately measure and forecast.



Key benefits

Exceptional data capture that measures visibility in maximum ranges from 2 to 50km (1 to 27NM) MOR. Advanced models also capture present weather information.

Rugged, weather-proof design that ensures low maintenance need and high data availability.

Down-looking sensor hoods protect the optical surfaces from external contaminants.

Forward scatter visibility sensors for greater accuracy in calculating visibility. Capacitive RAINCAP® precipitation sensors in advanced models detect multiple precipitation types, intensity, and accumulation.

Optional hood heaters prevent the buildup of ice and/or snow in the optical path.

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 Present Weather and Visibility Sensors PWD Series is designed to meet the unique challenges of visibility and present weather measurement for onshore and offshore maritime operations, including harbors, coastal areas, ships, and offshore platforms. Vaisala's PWD Series is the industry standard, approved by major oil companies.

The PWD Series delivers a mix of visibility reporting range (Meteorological Optical Range or MOR), characterization of reduced visibility, precipitation type identification, precipitation accumulation/intensity measurement, and report formats (WMO, NWS code tables). It also includes analog and serial line output and optional hood heaters for winter conditions. The PWD Series provides off-the-shelf accuracy and reliability and can be easily and economically upgraded. Wherever visibility reporting is necessary, Vaisala offers a cost-effective and reliable solution that grows to meet your measurement needs.

Applications

- Feeding visibility and present weather into shipboard weather systems to optimize route and operational planning.
- Informing harbor travel protocols to ensure safe operations in poor visibility.
- Monitoring conditions around offshore platforms for effective coordination of supply vessels, helicopters, and other operational support traffic.
- Generating detailed forecasts to inform early warning and safety protocols.
- Integrating visibility and present weather capture capabilities into an onshore, ship, or offshore platform AWOS.
- Calculating visibility information that ships can use to determine safe passage routes into and out of harbors.

