Vaisala Shipboard Weather Systems

/ CONFIDENT TO OPERATE IN ANY WEATHER
Shipboard Weather Systems

Building on more than 80 years of experience, Vaisala has a unique understanding of weather measurement, extensive expertise, and global presence, with solutions in over 120 countries. Vaisala is your global maritime weather expert.

Personnel onboard a vessel are put under extreme pressure to make accurate and timely decisions regardless of the type of vessel. Improve your safety, operational efficiency, reduce the risk of collisions, grounding and heavy weather damage with a Vaisala Shipboard Weather System. Choosing Vaisala means you can feel confident that you have chosen a reliable, flexible and proven solution for any weather condition.

Ship Wind System

The wind system is designed to aid navigation on the ship’s command bridge. The system design is simple and robust with the presentation and colors selected for a ship environment. When integrated to gyro compass and GPS (heading and course information), the display is also able to calculate true wind.

Ship Weather System

Ships conducting worldwide trade need to be equipped with a shipboard weather station providing information about wind, air temperature, humidity and barometric pressure. Changing air pressure indicates weather changes, and high relative humidity forewarns of low visibility. Vaisala provides sensors for common, as well as, more demanding weather conditions. All sensors are connected directly to the Vaisala weather panel display, which makes the system design simple, robust and easy to install.

Advanced Ship Weather System

In need of more weather information, such as on a research vessel? Then a Vaisala Advanced Weather System will meet your needs. All parameters can be monitored in one consolidated easy-to-read display. User configurable alarms monitor conditions and ensure safe operations. The automatic selection of windward wind sensor eliminates the effects of air flow distortion induced by ship superstructures. The data logging provides access to historical data for easy report generation, and data quality control ensures reliable observations.

* Optional present weather, cloud height and coverage, rain and lightning detection.
Confidence Starts with Experience

A marine vessel operates in all sorts of weather conditions and knowing the conditions the ship is currently experiencing is vital to the safety and operation of the ship. You will feel confident knowing that reliable and accurate sensors form the backbone of your marine weather system. Winter conditions, humid environment, or hot weather are all challenges Vaisala sensors are designed to meet.

Vaisala Core Components

- **Automatic Weather Station**
  Automatic windward wind sensor selection, and is compliant with Lloyd’s Register and IEC 60945 requirements.

- **Panel Displays**
  Bright, compact displays capable of calculating true wind, dew point, and pressure parameters.

- **Maritime Observation Console**
  User interface for weather data management and display including storage of observations for archiving.

Proven Sensors

- **WIND**
  - Vaisala WINDCAP® Ultrasonic Wind Sensor WMT700
    - Heated version allows for use in robust applications
    - DNV Type Examination Certificate
  - Vaisala Weather Transmitter WXT532
    - Compact sensor for wind speed and direction
    - Easy to Install

- **MULTI-WEATHER INSTRUMENTS**
  - Vaisala Combined Pressure, Humidity and Temperature Transmitter PTU300
    - Redundant sensors ensures accurate & reliable readings
    - Three measurements in a single sensor
    - DNV Type Approval Certificate
    - Compact and durable for easy installation
  - Vaisala Weather Transmitter WXT534
    - Compact sensor for air temperature, humidity & pressure
    - Compact and durable for easy installation
  - Vaisala Weather Transmitter WXT536
    - Measures wind, rain, pressure, temperature & humidity
    - Compact and durable for easy installation

- **PRESSURE**
  - Vaisala BAROCAP® Digital Barometer PTB330
    - Redundant sensors ensures reliable & accurate readings
    - Long term stability

- **TEMPERATURE & HUMIDITY**
  - Vaisala HUMICAP® Humidity & Temperature Probe HMP155
    - Quick recovery in humid marine environments
    - Long term stability

- **VISIBILITY & PRESENT WEATHER**
  - Vaisala Visibility Sensor PWD20/22
    - Superior visibility measurement regardless of the conditions
    - Detects multiple precipitation types

- **CLOUD HEIGHT & COVERAGE**
  - Vaisala Ceilometer CL31
    - Excellent performance of cloud detection during precipitation
    - Single lens optics allows for detection of low clouds

- **LIGHTNING**
  - Vaisala Thunderstorm Local Lightning Sensor TSS928
    - In-Cloud and cloud-to-ground lightning within 30 nautical miles
    - Optical coincident requirement eliminates reporting of non-lightning events