

# Vaisala Met-Ocean System Components

/ FOR CRITICAL WEATHER CONDITIONS



**VAISALA**

# World-Class Vaisala Sensor Technology

*Vaisala manufactures the widest selection of original meteorological sensors, systems and displays.*



## Ultrasonic wind sensors

- Vaisala's unique redundant triangle path technology always ensures turbulent-free measurement
- Robust design enables functioning in rough conditions
- DNV-approval makes Wind Sensor WMT700 an ideal choice for maritime environments
- Body heating available for harsh offshore weather conditions
- The FAA relies on Vaisala WINDCAP® technology



## Barometric pressure transmitters

- Vaisala BAROCAP technology ensures excellent long-term stability in various atmospheric pressure measurements, even in outer space
- Up to three pressure sensors for redundancy in critical applications like helidecks
- QNH and QFE pressure compensation useful in helicopter operations



## All-in-one weather transmitter

- WXT520 measures wind speed and direction, liquid precipitation, barometric pressure, temperature and relative humidity
- Compact and durable with easy installation (single-bolt mounting)
- The best price to quality ratio for all maritime environments

## Benefits

- The widest selection of original meteorological sensors and systems based on nearly 80 years of experience
- Extensive track record and global presence
- Easy upgrade of existing WMS to CAP437 compatible HMS
- Industry standard, approved by major oil companies
- All sensors are factory calibrated or tested and delivered with calibration certificate or factory test report
- Vaisala systems have interfaces to wide range of sensors from selected partners
- Field proven fully automatic 24/7 operation in all weather conditions and geographical areas

## Standards and Regulations

- WMO
- NORSOK
- ICAO Annex 3
- CAP437/CAP746, BSL D5-1
- ATEX
- Lloyd's Register
- DNV
- IEC 60945





## Visibility and present weather sensors

- PWD22 is the industry standard in offshore oil and gas
- Low life-cycle costs and less burden due to very low failure rates in the field
- Meets FAA and ICAO specifications for visibility measurement
- Reputation of being the most rugged, weather-proof design which ensures low maintenance and high data availability
- Accurate evaluation of precipitation type ensured by three independent measurements and sophisticated algorithms

## Oceanographic measurements

- Wave radars for wave height, period, direction, sea level and tide measurement
- Sensors for sea conductivity, temperature and salinity measurement
- Ocean current meters and profilers for current monitoring
- Delivered tested and fully integrated with mounting accessories, mooring frames, offshore cables and shipboard deployment devices



## Cloud height and amount sensors

- CL31 is the industry standard in offshore oil and gas
- Preferred choice of national MET offices, airports and oil companies worldwide
- Unique single-lens optics technology ensures excellent performance in low altitudes critical to helicopter operations
- Reliable, fully automatic 24/7 operation in all types of weather, including harsh conditions
- Extensive remote self-diagnostics ensure low downtime and cost savings



## Dynamic motion sensors

- Provide highly accurate real-time motion data for offshore traffic support and vessel dynamic positioning
- Delivered tested and fully integrated with mounting accessories and cable.
- Field proven sensors from world leading manufacturers



## Data collection and communication

- Over 30 years of experience in maritime weather observation systems ensuring continuity in partnership
- Reliability and continuity brought to you by the 5th generation of automatic weather stations
- The original and unique fully integrated maritime automatic weather stations resulting in easy project management and continuous support
- Extreme protection for all environments with acid-proof enclosure resulting in low life-cycle costs



- Designed especially for critical maritime weather applications complying with Lloyd's Register and IEC60945

## Humidity and temperature transmitters



- Vaisala HUMICAP® technology ensures excellent accuracy and long-term stability
- More than 30 year track record in successful humidity measurements
- The warmed probe technology (prevents condensation) in high humidity conditions and the chemical purge option in high chemical concentration environments help to maintain measurement accuracy.
- Intrinsically safe model available

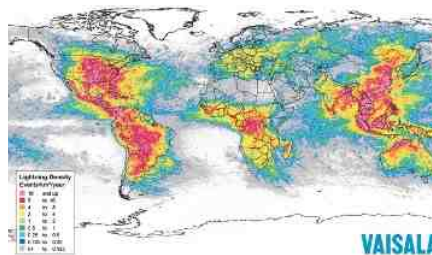
## Displays and software



- Vaisala Maritime Observation Console PC software suite provides graphical user interface for weather observation systems
- Software display and store system and sensor data, capable of data archiving and showing historical graphs
- CAP437 compliant display software available for Helideck Monitoring Systems
- Maritime Wind Display WID411 is compact and clear panel display capable of true wind calculation

## Lightning detection

- Wide range of Vaisala lightning sensors provide superior performance in local area lightning tracking
- Global Lightning Dataset GLD360 provides real-time lightning data generated by Vaisala owned and operated worldwide network
- Early warnings of upcoming lightning threats
- Improved safety and operational



- efficiency result in lower downtime
- GLD360 provides accurate and efficient lightning detection with no capital investments needed

Quality	Credibility	Continuity
Vaisala's systems are flexible and field proven in thousands of installations from pole to pole and even in outer space. Quality and low maintenance need ensure low risk for investments and low cost of lifecycle ownership.	Vaisala is the industry leader with the global sales network combined with the local service ensuring short response and delivery times. The systems are complied with required maritime standards.	Vaisala has been around for nearly 80 years, and will be the reliable partner for weather observations also in the future. Vaisala is the preferred choice among meteorological and aviation customers.

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