

OCEANOR SEAWATCH MINI II Buoy



The OCEANOR SEAWATCH™ MINI II is a low-cost general purpose buoy. The SEAWATCH MINI II features:

- Extremely robust construction
- Solar charging allowing long-term unattended operation
- Wide range of sensors
- Optional Meteorological Sensor Mast
- Choice of GENI datalogger or WAVESENSE integrated datalogger and directional wave sensor
- Various two-way communication options
- A good alternative to WAVESCAN and SEAWATCH buoys where depth and current conditions allow.

The SEAWATCH MINI II

A robust, economical and flexible buoy.

Robust

The hull of the SEAWATCH MINI II is made from foam-filled polyethylene. The choice of material ensures no risk of corrosion and sulphation as well as excellent resistance to impacts. The buoy is practically unsinkable. Below the water surface it is spherically shaped to ensure optimal wave measuring capability. Above the surface the robust marine grade solar panels have been fitted in recesses for security.

The optional wave sensor is a complete solid-state design with no moving parts.

Economical

Maintenance free solar panels and sealed lead-acid backup batteries enable long-term unattended operation. The accumulated charge and load current are transmitted to shore for control of the power consumption. For low sun radiation conditions, lithium batteries can be supplied.

Flexible

The SEAWATCH MINI II allows two-way communication via radio link. For long distance data transfer, the high capacity and reliable Inmarsat-C or Argos satellite is used. For shorter distances GSM mobile phone is an alternative. The buoy's position can also be monitored by means of one-way satellite position tracking.

Numerous sensor alternatives exist. Please contact us with your requirements. Limitations exist in the number of sensors, their size and power consumption. Through the use of an optional mast meteorological parameters can be measured.

Applications

- Harbour and coastal monitoring
- Coastal engineering
- Offshore design and operations
- Scientific studies
- Wave energy studies
- Maritime traffic control
- Water quality control studies

Directional Wave Measurements

The buoy is ideal for directional wave measurements.

When used for directional wave measurements, the integrated wave sensor and datalogger means one less power consuming processor, decreased system complexity and hence increased system reliability.

Technical Specifications

Storage Capacity

Flash memory for data: 28Mb, sufficient for approx 1 year of raw data

Communication

Radio: UHF error correcting modem, up to 10W output power

Optional: Argos, Inmarsat-C and GSM

Power

Solar Panels: 60W

Lead-acid battery bank: 124Ah

Optional: Lithium batteries: 480Ah

General

Material: Polyethylene

Flash Light: LED based, 3-4 nautical miles range, IALA recommended characteristic

Processing: On-board calculation of all parameters

Positioning: GPS Receiver

Dimensions and Environmental Data:

Weight: 320kg

Diameter: 1.25m

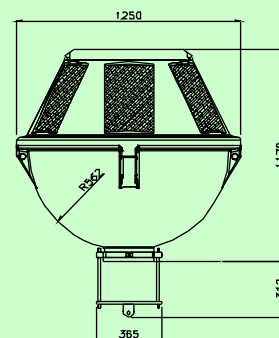
Net buoyancy: 410kg

Operating Temperature: -5 to +60°C

Sensor Options:

Directional waves, surface current speed and direction, surface temperature and salinity, temperature and salinity profiles, dissolved oxygen, light attenuation, chlorophyll-a, hydrocarbons, air temperature, air pressure, wind speed and direction.

Please enquire for other parameters.



Measurements in mm

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