

WATCHMATE BUOY™



WatchMate™ is the ultimate small multipurpose buoy. The AXYS proprietary hull design features a welded aluminium hull surrounded by a moulded ionomer foam ring for superior buoyancy and durability. The rigid aluminium superstructure is bolted securely to the hull and is designed uniquely for freshwater and marine monitoring applications. At a weight of 285kg fully loaded with sensors, WatchMan500™ payload and batteries, the WatchMate™ is a rugged, lightweight environmental monitoring buoy that maintains all the requirements for a navigation aid as well.

The superstructure is fitted with a solar panel array, navigational marks and lights as well as the mountings for meteorological sensors, payload and telemetry hardware. The aluminium substructure of the WatchMate™ hull houses the WatchMan500™ controller, solar rechargeable batteries and TRIAXYS™ directional wave sensor. The open design of the superstructure allows the entire inner housing to be lifted and suspended for servicing of the modularly designed components. Additionally, the buoyancy ring has been retrofitted with easy to service Moonpools used to house downward facing current profilers and/or in-situ water quality sensors. This attention to detail in the field serviceability of the WatchMate™ makes it an ideal system for technicians worldwide. The WatchMate™ can be equipped with a wide range of sensors for monitoring weather, air, water quality, waves and currents among other parameters, in coastal areas, lakes, reservoirs and rivers.

In addition to the WatchMate™ buoy, AXYS also customizes other hull and payload configurations for specialized applications. WatchMate™ sets a new standard in operational performance and durability for a small multipurpose buoy platform.

Features:

- Multipurpose platform
- Easy to deploy and service
- Low operational costs
- Expandable to allow new sensors
- Supports a variety of telemetry options
- Monitor and control from your office
- Lightweight and robust hull construction
- Real-time meteorological, oceanographic and water quality data

The ideal data collection buoy for lakes, reservoirs, rivers, canals and coastal waters.

Specifications:

• Hull Construction

Welded aluminium hull with foam buoyancy ring. One watertight central compartment for electronic payload, batteries and sensors. Aluminium superstructure bolted onto the hull. The substructure of the hull is constructed of ionomer foam for superior buoyancy and durability.

• Finish

Powder coated.

• Ballast

Integrated into mooring bridle.

• Weight

285kg fully loaded with typical met sensors, WatchMan500™ payload and batteries.

• Dimensions

1.2m diameter.
Anemometer height 2.75m.

• Mooring

Reverse catenary, chain, semi-taut, or false bottom.

• Navigation Marks and Light

IALA standard lamp. Radar reflector equivalent to 10 m² (X-band).

• Visual Area:

The WatchMate™ buoy can be supplied in any of the red, green, yellow and black colour configurations with appropriate top marks in compliance with internationally recognized standards for navigation buoys.

• Electronics

AXYS WatchMan500™ data acquisition and processing system.

• Typical Sensors

Wind speed, wind direction, air temperature/relative humidity, solar radiation, barometric pressure, wave height, direction and period, current speed and direction, GPS, compass CTD and radiation.

• Water Quality Sensors

Conductivity (salinity), chlorophyll, fluorescence, dissolved oxygen, pH, radiometer (water colour), turbidity, water temperature and depth, nutrients.

• Sensor Mounts

Meteorological, oceanographic and water quality sensor mounting designed for servicing in the field.



WatchMate iss A March 2009