SOSI
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Protected Water Data Buoy

»Model PWDB-48-1500

SOSI's Protected Water Data Buoys are anchored systems designed for protected water environments. PWDBs are usually deployed to serve national forecasting needs, maritime safety needs or to observe regional climate patterns. These buoys are configurable with a variety of meteorological and oceanographic sensors. Measurements from an open water buoy might include: wind and air surface variables, wave height and direction variables, sea surface temperature, water conductivity, salinity and density, trace metals and water quality, oil spill fluorescence, PAR, UV-B, underwater video, barometric pressure, GPS and other data which is transmitted in real-time and relayed to its deplorer by Iridium or ARGO telemetry.

PWDBs were originally designed for harsh deployments in the protected water, coral reef atolls of the Northwestern Hawaiian Islands. These tested designs have since been modified and perfected for long-term observational deployment. The hulls are constructed of fiberglass and polyurethane foam with an internal stainless steel frame. An integral watertight compartment holds the 24-month battery pack, Trident data logger, ARGOS transmitter (or Iridium modem) and other components. Aluminum surface and subsurface masts support the atmospheric and oceanographic sensors.

The SOSI Trident data logger is the brain of our buoy family. It is a flexible and tested piece of equipment that controls the sensor and transmitter duty cycles, cycles the power, records the data and controls the telemetry transmissions from the buoy. It has eight 24-bit and four 16-bit analog channels, two RS-485, eight RS-232, two SDI serial ports, four digital inputs and four digital outputs. It also has three +12 vdc, two +5 vdc, and two precision RTD outputs. The PWDB-48-1500 can be supplied with either an ARGOS transmitter or Iridium modem. It can be upgraded with four additional 16-bit analog channels, two RS-485 serial ports, four digital inputs and four digital outputs.

Thank you for reviewing the PWDB. Please contact our helpful technical staff if you require assistance with this product. Our team of skilled engineers, designers and trained technicians are ready to assist you with product modifications and solutions to meet your most demanding requirements.

Be it an existing product or a customized package—our mission is to offer innovative engineering, design and quality manufacturing for our diverse and growing global customer base. Take action and make waves with SOSI today!

Standard Features

- Wind Speed & Direction
- Air Temperature & Pressure
- UV-B & PAR
- Sea Surface Temperature
- Sea Surface Conductivity
- Sea Surface UV-B & PAR
- 24 Month Lithium Battery Pack

Options

- Telemetry Packages
- Collocated Radiance And Irradiance
- Solar Cells
- GPS

Technical Specifications

Gross displacement	727 kg (1,500 lb.)
Hull diam.	1,220 mm (48 in.)
Power (12 month)	alkaline battery pack
Weight	295 kg (650 lb.)
Telemetry	ARGOS / Iridium

• SOSI can design and fabricate moorings for your specific applications

*Specifications subject to change

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