DBT-4
GPRS-IRIDIUM-UHF
DATA BUOY TELEMETRY SYSTEMS

The DBT-4 telemetry systems build upon the extremely popular DBT-3 systems deployed Worldwide and designed for reliability in extreme environments.

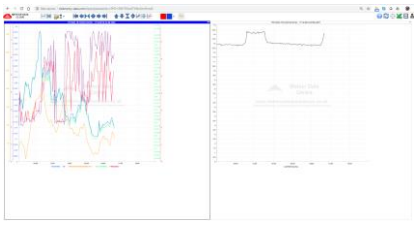
These systems are designed to facilitate simple implementation of remote, pseudo-real-time telemetry on data buoy platforms or other remote locations. Systems are generally supplied with GPRS-3G-4G cell phone connectivity but are also available using IRIDIUM Satellite, UHF or VHF.

A key feature of the system is the open nature of its architecture. Almost any instrument or instruments with a digital or analogue output can be connected using RS-232, UART, SDI-12 or Ethernet to the input of the telemetry system, and its data are presented in a reliable and transparent way. In particular Multi-parameter CTD's, turbidity probes, meteorological sensors, ADCP's acoustic wave profilers, acoustic modems, hydrophones etc have been accommodated. The new DBT-4 system can also accommodate cameras. The electronics contained within the remote (transmitter) unit takes care of infrastructure management, power supply control, telemetry error checking and battery charging. Almost any combination can be catered for upon request. The systems are designed to be rugged and water tight for deployment in extreme environments such as ocean data buoys and are extremely low power. All systems are fitted with a GPS receiver and antenna used to provide system timing and position monitoring so that alarms can be raised should the system drift off station. The battery voltage and current internal temperature, pressure and humidity along with impact sensors are also monitored and transmitted to provide advance warning of any system issues that may arise. The DBT-4 incorporates Wi-Fi connectivity for remote connection for testing, diagnostics and data download when in range. The DBT-4 has its own internal web server which allows users access to the system without the need for special software, only a Wi-Fi enabled device with browser is required.

Typically the modules are provided in IP68 enclosures, with connectors for sensor(s), battery and solar panels. The modules mount directly on our standard chassis for use with our DB range of data buoy hulls but can be adapted for a variety of platforms.

Depending upon the sensor(s) fitted the system will run happily with 2 to 4 20W solar panels, and a 38/72 AH battery, several configurations require only one 12AH battery and a single 10W solar panel.

In GPRS based systems, data are sent directly to a secure server which hosts a page or pages all password protected specifically for the end user. Via this portal, users may view real-time and historic data, arrange for data to be sent to named email addresses, set alarm levels which can trigger email alerts, download archived data, change sampling regimes, and show the position of the platform on Google maps. The portal can be configured to show users data in a variety of different formats and is configurable by the end user. The same service is available for iridium users, but data can be sent directly to a nominated email address for processing by the end user



DBT-4 Systems are generally pre-installed with untethered data roaming SIMS which allow the DBT-4 to connect to the strongest cell network, and automatically switch networks should one network become unavailable. Data are sent to our hosted portal (above) in a generic, standard format. Custom displays can be accommodated using the Port log System from our data partners OceanWise. Contact us for details.

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OceanWise

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Typical Platforms:

The DBT-3 system can be deployed on any of our Data buoy platforms, user provided platforms or indeed land based applications.

Minibuoy

DB-125

DB-180 to DB-240

DB-300 -360

Typical sensors:

Valeport radar water level/tide sensor

Camera

ANALITE Turbidity

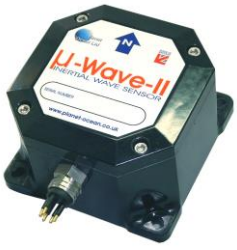
NORTEK Aquadopp

YSI- Multi-parameter

Valeport MIDAS CTD

Aaqua TROLL Multiparameter

SBE-19- Multi-Parameter



µ-Wave-II Directional waves

GILL GMX500 Weather Sensor

ic-Listen Hydrophone

Satlantic SUNA Nitrates

BRIZO-X GPS Wave Sensor

RADAC Radar Wave Sensor

MADE IN BRITAIN