

IDS DataBuff

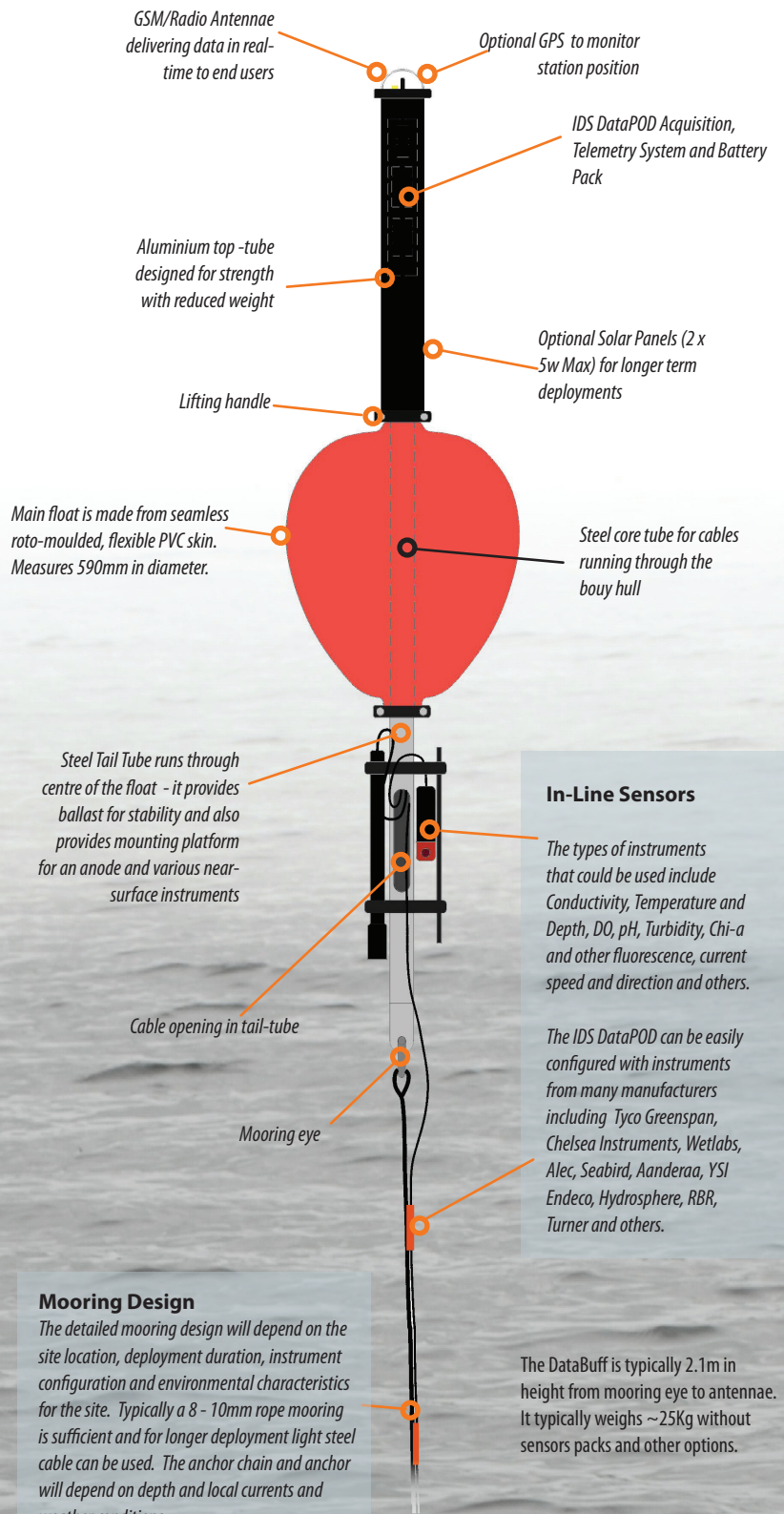
A Smart, Compact Data Buoy with Telemetry

A low cost, compact, data buoy solution for autonomous monitoring in lakes, reservoirs and sheltered coastal bays.

Ideal for applications in real-time, operational environmental monitoring

Features

- Rugged build
- Compact and light weight
- Flexible configuration
- Low power consumption
- Easily deployed
- Reliable data logger
- Integrated telemetry
- Optional Integrated GPS
- Data delivery to secure web
- Low cost



IDS-Monitoring

Specialists in Data Acquisition and Telemetry



The IDS DataBuff is a low cost solution for environmental monitoring in lakes, reservoirs and sheltered coastal environments.

The DataBuff Hardware

The DataBuff is a light weight robust data buoy that is easy to handle during transport, deployment, maintenance and recovery. Unlike most other data buoys this system is easily deployed and recovered from small boats.

The DataBuff hull is 590mm in diameter and the overall length of the DataBuff is between 2.1m and 2.4m depending on options. Without instrumentation a typical buoy weighs less than 30kg and has a net buoyancy of approximately 35kg.

The buoy hull is a rugged, seamless, flexible roto-moulded vinyl float. The buoy has a 50mm steel tube running through its core for cabling. The top structure is an 85mm diameter aluminium tube. The tail tube is normally galvanised steel with an option for 316 stainless steel. The tail tube can be fitted with instrument mounting brackets / clamps for near surface measurements. The mooring for this buoy is light weight and will depend on the site characteristics (e.g. 4 mm cable or 8-10 mm rope).

The DataBuff Software

The DataBuff setup software is simple to use and allows the user configure the sampling regimes, telemetry, alarms and power management. The DataBuff can be configured for data transmission to a client specified FTP site or can be configured to use the IDS DataLink management system.

IDS DataLink is secure web based data management and visualisation system. The station owner can control access to the data, annotate and edit data, set a wide variety of alerts and if necessary can easily integrate the data in graphical or tabular form into their own web pages. The DataLink system includes optional functions for automated data QC, automated data forwarding and for the automated generation of derived data.

Additional Information

Mobile Data

Alarms on the DataBuff or on the DataLink System can be setup to send an SMS alarm message to one or multiple mobile phones at anytime of the day or night. In addition the mobile modules in the DataLink system allow a user with a mobile phone monitor the data visually on their phone as required. The image opposite illustrates the type of interface that allows users to easily monitor the data collected by their DataBuff in real-time anywhere, anytime.

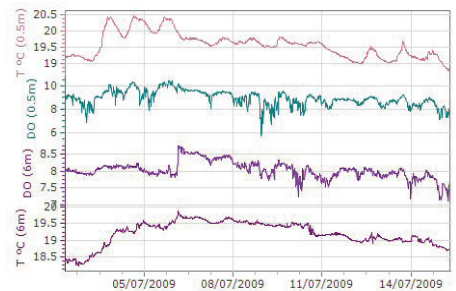
DataLink Hosting Options

The IDS DataLink system is normally offered by IDS Monitoring as a low cost managed service. This can mean a significant saving in costs for clients as they will not need to invest in hardware, software or maintain the ICT personel and skills normally associated with maintaining a real-time data management system. Alternatively, if clients wish to purchase DataLink or implement their own solution IDS Monitoring is happy to provide support.

The DataBuff includes a powerful IDS DataPod data acquisition and telemetry system. It includes a 12v power pack for the data logger, telemetry and powering instruments. There are options for different battery capacities depending on the nature of the deployments. For short deployments upto a couple of months there is usually no need for solar chargers. For longer deployments or when more power-hungry instrumentation is used battery charge is maintained with two rugged solar panels (~10W output).

The Data Acquisition System on the buoy has been designed with flexibility in mind and consequently allows the user great freedom when picking the instruments / sensors. The normal configuration on the DataBuff is for four instrument ports which can be a mix of analog (12bit, 0-5V or 4 - 20mA) and digital inputs (RS232, RS48, Pulse Counter). Additional inputs are available as an option at the time of ordering. The standard telemetry is GSM/GPRS with options for Iridium Satellite or ISM band radio (433MHz or 866MHz).

A significant advantage with Datalink is that users can integrate data coming from non-IDS systems, therefore maximising the return on previous investment in legacy systems.



Applications for the DataBuff

This buoy is a cost-effective option for application in many areas including aquaculture, pollution control, water production industry, dredging support, WFD related monitoring, academic research, climate studies or where data is required in real-time from a lake, reservoir or sheltered coastal location.

Related Products

The DataPOD used on the DataBuff and other IDS Monitoring data acquisition systems operate as a standalone solutions or can be used on other platforms.

Other related products include our larger buoys, Water Level and Tide Stations and other water quality monitoring solutions.

IDS DataLink is a powerful on-line operational data delivery and data management system.

