

DB600 Real-time Buoy Overview

XYLEM ENVIRONMENTAL MONITORING SOLUTIONS

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Why Choose the DB600?

Deploying a high-quality data buoy has never been easier, or more affordable

- Lightweight; deployable by one person
- Hinged lockable deployment tube secures sensor against loss
- Plug and play compatibility with industry-leading sensors, YSI EXO, Aanderaa DCS and many other third party sensors
- Marine-grade materials tough enough for long-term deployments
- Ideal for use with YSI HydroSphere and other cloud platforms



Spec's & Application Information

Suited for low energy environments, protected bays, estuaries, lakes, and ponds

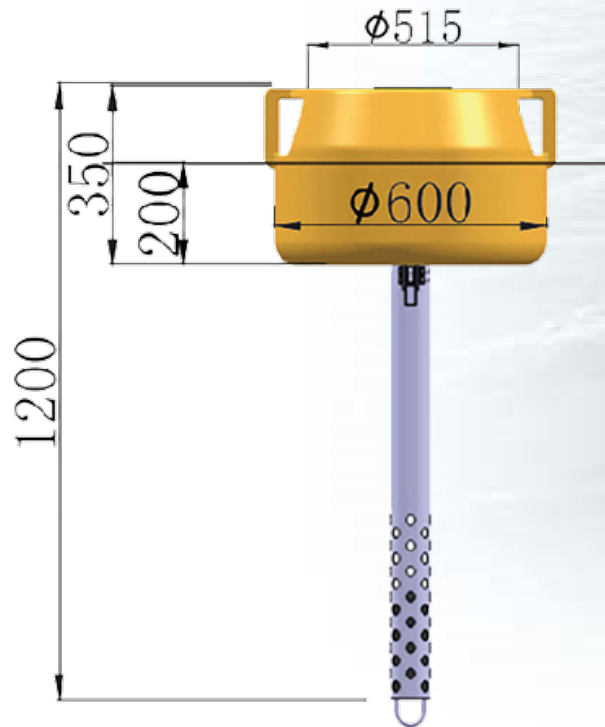
Beaufort Scale

Operational Sea State = 4

Survivability Sea State = 8

Min Operational Depth = 2m

Max Operational Depth = 25m



Spec's & Application Information

DB600 Specifications:

Diameter: 600 mm

Material: Polyethylene float & lockable SS316 deployment tube

Weight: 21 kg (including sonde tube)

Freeboard: 200 mm at maximum weight

Ai1 Standard Config Specifications:

Connection: Plug-n-play, depending on sensor selections at time of purchase

Inputs: Analog and digital

Communications: 4G or Iridium SBD Satellite

Array: 3 x 9W solar panels (27W total)

Battery: 7Ah Lithium battery

Waterproof IP67



Sensor Payload Options

Plug and play compatibility!

- YSI EXO (any type)
- Aanderaa DCS (4420 with upside down calibration)
- *other third party sensors



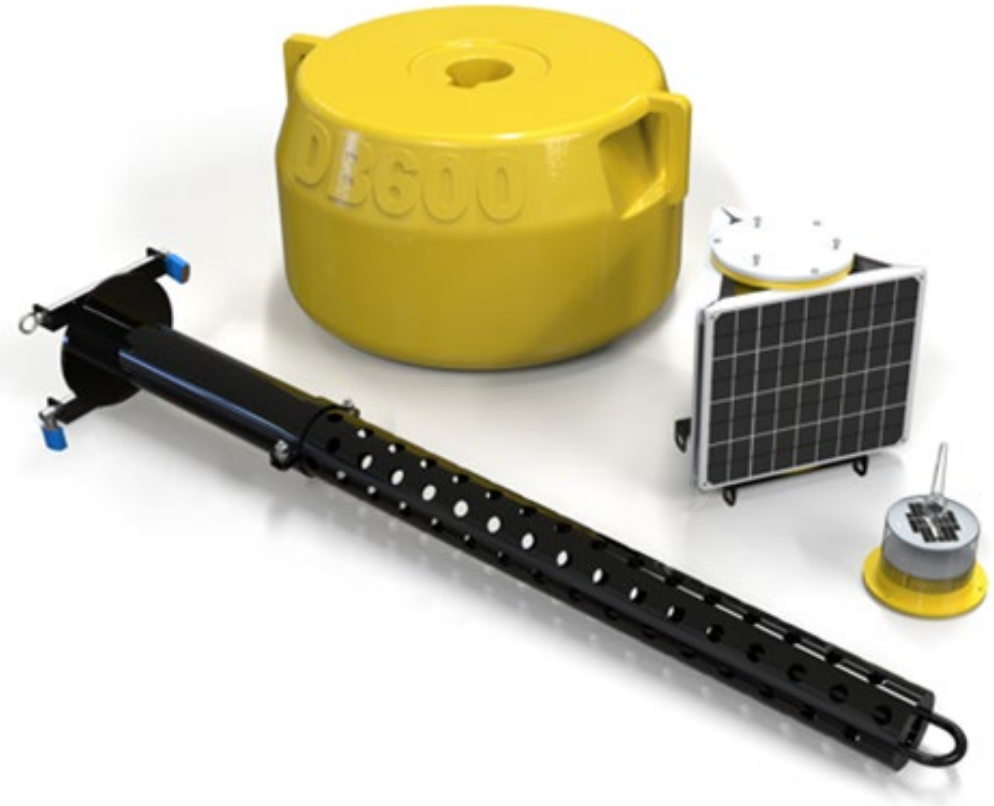
In development: wave height, direction & period

What's in the box?

Modular - arrives partially assembled

Package Includes:

- DB600 buoy
- Stainless steel sensor deployment tube
- Ballast chain
- Ai1 logging and communication system
- Solar power system
- EXO sensor cable
- Navigation beacon
- GPS for position tracking



Designed for easy final assembly

Data Viewing Options

HydroSphere

- For simple applications where basic data viewing and display is required
- Allows bidirectional access of the system



Eagle.io

- Suited for more advanced use case
- Moving average & weighted Moving Average
- Active geofencing/tracking
- Sophisticated alarming (email & SMS)
- Allows bidirectional access of the system
- Advanced historian with data-editing
- Allows public dashboards

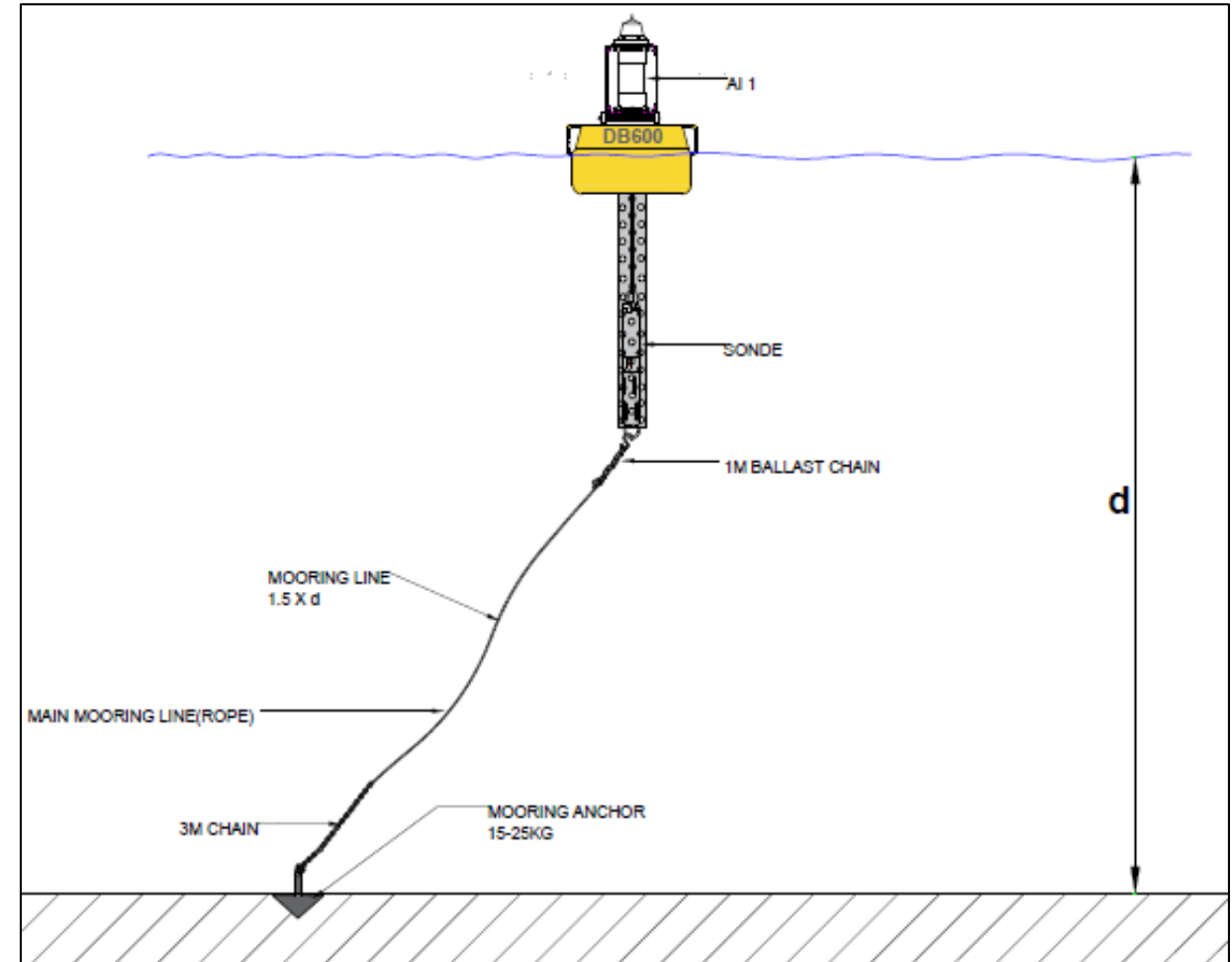
Can also send data to end-users in-house data management systems, SCADA system or local collection software. Supports direct access with iPhone and Android applications

Note: DB600 is supplied with global SIM card and configured data portal through to preferred landing pad

DB600 Mooring

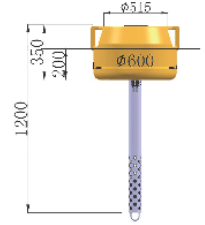
Typical Single-Point DB600 Mooring Configuration

- Low cost
- Easily sourced components from local suppliers
- Full instructions and guidance provided in the DB600 QuickStart



Documentation & Support - Links

DB600 BUOY ALL-IN-ONE, REAL TIME DATA BUOY



Package Includes:

- YSI buoy
- Stainless steel sensor deployment tube
- AI1 logging and communication system
- Solar power system
- Sensor cable
- Navigation beacon
- GPS for position tracking

DB600 Specifications

Diameter	600 mm
Material	Polyethylene float, 55316 deployment tube
Weight	21 kg (including sonde tube)
Freeboard	200 mm at maximum weight

AI1 Standard Config Specifications

Connection	Plug-n-play, depending on sensor selections at time of purchase
Inputs	Analog and digital
Communications	4G or Iridium SBD Satellite
Power	3 x 9W solar panels (2.7W total, effectively 1W on rotating buoy), 7Ah battery
Waterproof	IP67

AI1 Detailed Specifications

Inputs & Outputs

- 3 inputs, 24-bit resolution, -100 to +2500 mV range, ±0.04% accuracy (0 to 40°C)
- 7 configurable digital and pulse counting ports
- Integrated USB port and 2 x RS232 ports
- Option port typically fitted with RS485 adapter for EXO Sonde
- Integrated GPS for location tracking

Communications

- Select 4G cellular or Iridium Satellite
- Management of communications through datalogger program for power optimization
- Cellular and Satellite models support Hydrosphere and other cloud connections

Power

- Smart sensor power management (12V/800mA and 5V/1A switched power output)

General

- Inbuilt status LED indicators and optional internal display
- IP67 (NEMA 4X) before being modified for sensor mounting or cable entry
- Battery-backed internal clock ±1 min/month. Execution rate from 0.1s to once/day
- 5°C to +50°C operating range (lithium charging)
- 1 year warranty, return to base, parts and labor

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DB600 Spec Sheet

xylem
Let's Solve Water

Quick Start Guide
2021, October 15

DB600 Quick Start Guide

The DB600 is supplied for quick assembly prior to deployment.
Detailed instructions are in the [AI1 manual](#).




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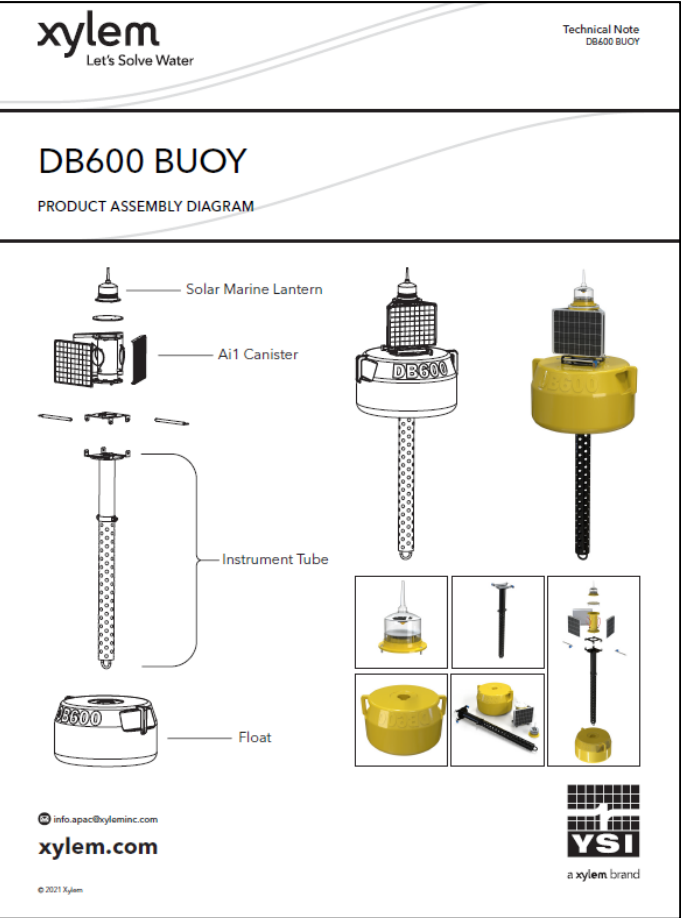
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DB600 Quick Start Guide

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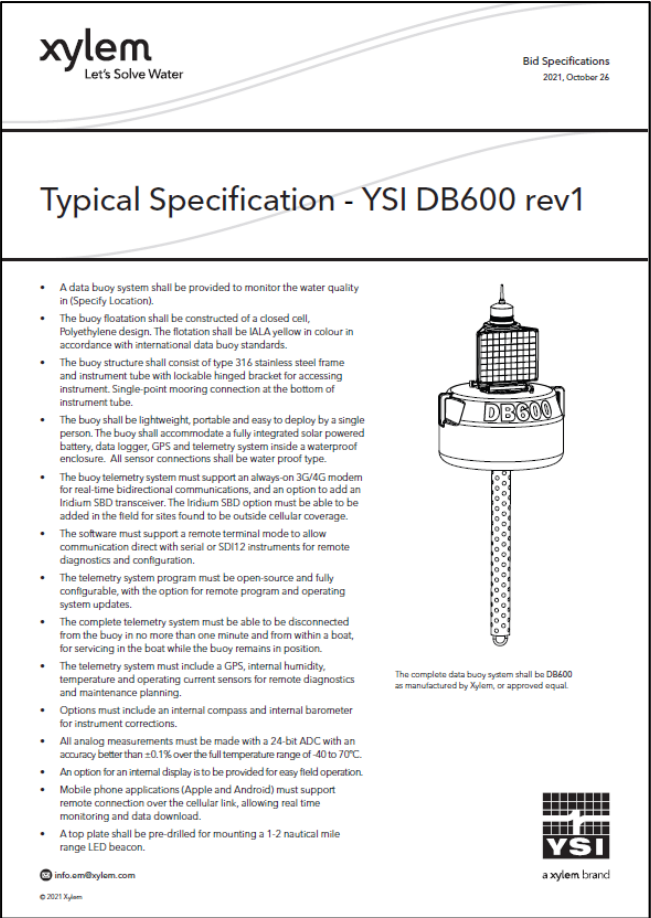
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Documentation & Support - Links



Adobe Acrobat
Document

DB600 Assembly Diagram



Adobe Acrobat
Document

Typical Specification-DB600



LAB



ENVIRONMENTAL



PROCESS

Support/Questions?

ServiceAUS@xylem.com

Orders?

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