YSI Mini Vertical Profiling System (VPS)

Overview
Xylem (YSI) introduced the Vertical Profiler 15 years ago for the profiling of Water Quality parameters through the storage waters on major dams in order to provide an early warning to upset conditions approaching offtake towers that draw water for consumption.

The VPS has played a pivotal role in the decision making process for the management of Algae Blooms, Turbidity plumes and Dissolved Organic Matter concentrations in order to assist with pre-empting the water treatment process.

To complement the existing VPS fleet, Xylem has introduced the Mini VPS to complement the portfolio which includes the Pontoon, Fixed, Ocean and Drone Profilers.

The Mini VPS has been designed for the shallower Waterways, Lakes and Storages, allowing for a quick deployment via a 2 point mooring system.

Features Include:
- The Mini-VPS utilises Xylem's carbon fibre winch designed for the WSD4 WQ Profiling Drone
- Solar powered DC system
- Autonomous profiling range 1-20m
- Real-time data to the cloud
- Secure modular design allows flexibility to add wide range of sensors
- Safer operation – no divers required.
- Easily deployed and moored

System Specifications:
- Buoy Dimensions: 1,350mm outside diameter; 1,180mm tall
- Weight: 75kg
- Reserve Buoyancy: 295kg
- Hull Material: Rotationally-moulded UV-stabilized virgin polyethylene. Closed-cell polyurethane foam filling (float section)
- Hardware Material: 316-grade fittings
- Solar powered and 12VDC operation
- Editable setup file provided to set measurement routine and interval
- Supports 3G/4G protocol to the Cloud
- Enhanced version supports Radio and Satellite Comms and SCADA integration
YSI EXO Water Quality Options:
The Mini VPS utilizes the robust and renowned YSI EXO2 series multi-parameter sonde for the measurement of:
• Temperature, EC, Salinity, Total Dissolved Solids (TDS)
• pH & ORP
• Turbidity & Total Suspended Solids
• Dissolved Oxygen
• Dissolved Organic Matter (DOM)
• Total Algae - Blue Green Algae, Chlorophyll
• Rhodamine

EXO Enhancements:
Xylem has developed the auxiliary port on the EXO2 to accept a Depth Sounder. This integration allows the Mini VPS to know the distance to the bottom and using the integrated depth sensor on EXO, position itself at the required depth through the profile for co-ordinated measurements.

High-impact plastic and titanium resists breaking
Customized, batteryless sonde that comes with the same warranty and capabilities as the standard EXO2, and is ideal for specialized applications such as:
• Attachment to an AUV or aerial drone
• Integration with a buoy
• Horizontal profiling where light weight is optimal

EXO Specifications
https://www.ysi.com/EXO2

System Options:
• Single Point and/or Current Profiling for Estuarine applications and Canal developments
• Air Temperature, Relative Humidity, Wind Speed & Direction, Rainfall, Barometric Pressure, Solar Radiation

The Mini VPS is a valuable addition to the current range of Profilers to suit your application needs. Contact your nearest Xylem office for further details as we endeavour to Solve Water.