



Vertical Profiling Systems

HIGH RESOLUTION VERTICAL WATER QUALITY COLUMN MEASUREMENTS



a xylem brand



Turb 50FNU DO 4%
BGA 40% T24°
fDOM 25%
NO3 3.5mg/l

VPS Benefits

- **Manage** the impacts from an intrusion event
- **Control** the costs of water drawn for treatment
- **Monitor** catchment and recreational usage impacts
- **Geospatial mapping** of intrusion events, thermoclines and or algal plumes
- **Understand** the health of the waterway, dam, lake



Turb 1FNU DO 8%
BGA 2% T18°
fDOM 1%
NO3 0.1mg/l

Turb 1.2FNU DO 7%
BGA 1% T16°
fDOM 0.5%
NO3 0.1mg/l

Turb 1.5FNU DO 6.5%
BGA 0.5% T14°
fDOM 0.5%
NO3 0.1mg/l

Offtake Tower



Deployment Configurations

5 Different Deployment Configurations

Ocean, Pontoon, Fixed, Mini and Aerial that provides a reliable, fully-automated data collection platform for the early warning of intrusion events for business and environmental critical decision making.

- Rugged, non-corrosive mechanical winch and drive mechanism
- Compatible with all YSI multi-parameter water quality Sondes equipped with depth sensors and 3rd party integrated sensors via EXO's auxiliary port
- Profile Wizard software for easy set-up and deployment
- Profile data analysis and export software
- Meteorological sensor package
- All forms of wireless data transmission available

Eagle IO &
HYPACK ViPer
Software



PONTOON (VPS-XFP)



- Water supply dams
- Re-use reservoirs

FIXED (VPS-XFL)



- Dams
- Re-use reservoirs

OCEAN (VPS-XOW)



- Offshore Aquaculture pens
- Catchment runoff

AERIAL DRONE (VPS-XAR)



- Measure upset events on any water body

MINI (VPS-XMB)



- Canal developments
- Evaporation ponds
- Lakes

YSI Multiparameter EXO Sondes

Fitted with an anti-fouling guard, the EXO is perfect for long-term continuous monitoring.

Highest Data Quality

Onboard monitoring systems verify sensor operations

Industry-leading Anti-fouling

Best-in-class anti-fouling wiper technology

Titanium Components

The toughest grade parts guarantee operation well into the future

Digital Smart Sensors

Auto-recognition of any sensor in any port

exo

EXO sondes feature universal smart ports for sensor installation



Vertical Profile System

Xylem Vertical Profilers - APAC

VPS Option	VPS-XFL	VPS-XFP	VPS-XMB	VPS-XOW	VPS-XAR
Type	Fixed Land Mounted	Floating Pontoon	Buoy	Buoy	Aerial Drone
Dimensions	600 x 600 x 1500mm	3000mm x 2000mm	1350mm	2200mm	600 x 600 x 600mm
Max Profiling Depth	100m	100m	25m	50m	25m
Power Supply	AC or DC	12VDC	12VDC	12VDC	12VDC
Max Current	0.5 knots	0.5 knots	1 knots	3.5 knots	2 knots
Measurement Options					
Water Quality	√	√	√	√	√
Meteorological	√	√	√	√	√
Current - Single Point	x	√	√	√	x
Current - Profiling downward looking	√	√	√	√	x
Current - Profiling upward looking	√	√	√	√	x

Vertical Profile System Specifications

Minimum Profile Depth	0.5 meter
Maximum Profile Depth	50 -100 meter option for Ocean, Pontoon & Fixed, 25 metre option for Mini & Aerial VPS Drone
Depth Profile Setpoint Accuracy	±0.1 meters
Minimum Profile Step Size	0.5 meter
Communications options	4G, Radio, Satellite, any dual combinations and SCADA integrations
Standard Payload Integrated Options	YSI EXO multi-parameter water quality Sonde with depth, PAR, Depth Sounder, Nitrate and range of 3rd party sensors
Power Requirement	60W, 12V DC 18 ah min
Applications	Environmental impacts that cover Aquaculture Pens, Coastal & Estuary Studies, Drinking Water Supply Dam's, Habitat Lakes and Swamps, Urbanised Canal's, Distribution Survey's, Intrusion Event tracking