

# **Vertical Profiling Systems**

HIGH RESOLUTION VERTICAL WATER QUALITY COLUMN MEASUREMENTS



Turb 50FNU DO 4% BGA 40% T24° fDOM 25% N03 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

#### PONTOON (VPS-XFP)

#### OCEAN (VPS-XOW)



- Offshore Aquaculture pens
- Catchment runoff

#### 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



- Water supply dams
- Re-use reservoirs

#### AERIAL DRONE (VPS-XAR)

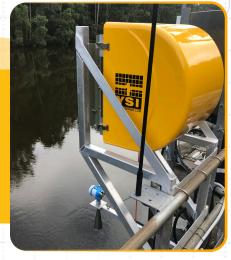


 Measure upset events on any water body

#### FIXED (VPS-XFL)

Eagle IO &

HYPĂCK ViPer



DamsRe-use reservoirs



10



#### EXO sondes feature universal smart ports for sensor installa

## Vertical Profile System

Xylem Vertical Profilers - APAC					
VPS Option	VPS-XFL	VPS-XFP	VPS-XMB	VPS-XOW	VPS-XAR
Туре	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	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Meteorological	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Current - Single Point	Х	$\checkmark$		$\checkmark$	х
Current - Profiling downward looking	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	Х
Current - Profiling upward looking	$\checkmark$	$\checkmark$		$\checkmark$	х

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			





info.em@xylem.com