

The YSI 600OMS VZ and optical sensors

## Pure Data for a Healthy Planet.®

Low-cost, single parameter optical monitoring system

# 6000MS VZ Optical Monitoring System

Dissolved Oxygen, Turbidity, Chlorophyll, Blue-Green Algae, or Rhodamine in a Low-Cost Package

Measure any one of the parameters above in combination with temperature, conductivity, and depth or vented level in fresh, sea, or polluted water.

The 600OMS **VZ** can take advantage of the newest optical sensors from YSI: ROX Reliable Oxygen (YSI 6150) and two new blue-green algae sensors (YSI 6131 phycocyanin and YSI 6132 phycoerythrin). Utilize the field-proven YSI 6136 turbidity sensor, the YSI 6025 chlorophyll sensor, as well as the revolutionary YSI 6130 rhodamine WT sensor. The OMS **VZ** also incorporates innovations in sensor configuration such as a conductivity and temperature module that fits into the sonde body.

- Wiped optics for maximum anti-fouling protection
- Ideal for long-term deployments
- · Low power requirements
- Field-replaceable optical sensors
- 150,000 reading memory
- Integrate with DCPs
- Compatible with EcoWatch® for Windows® data analysis software
- · Compatible with YSI 650MDS display and datalogger



#### Sensor performance verified\*

The 600OMS V **Z** sonde uses sensor technology that was verified through the US EPA's Environmental Technology Verification Program (ETV). For information on which sensors were performance-verified, turn this sheet over and look for the ETV logo.



To order, or for more info, contact YSI Environmental.

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"Sensors with listed with the ETV logo were submitted to the ETV program on the Y18 GoDEDS. Information on the performance characteristics of Y51 water quality sensors can be found at wow. epa.gov/etv, or call Y51 at 500.897.4151 for the ETV erification report. Use of the ETV name or logo does not imply approval or certification of this product nor does it make any explicit or implied warranties or guarantees as to product performance.

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#### **YSI 6000MS Sensor Specifications**

	Range	Resolution	Accuracy
ROX <sup>™</sup> Optical Dissolved Oxygen* % Saturation	0 to 500%	0.1%	0 to 200%: $\pm 1\%$ of reading or 1% air saturation, whichever is greater; 200 to 500%: $\pm 15\%$ of reading
ROX <sup>™</sup> Optical Dissolved Oxygen* mg/L	0 to 50 mg/L	0.01 mg/L	0 to 20 mg/L: $\pm$ 0.1 mg/L or 1% of reading, whichever is greater; 20 to 50 mg/L: $\pm$ 15% of reading
Conductivity**	0 to 100 mS/cm	0.001 to 0.1 mS/cm (range dependent)	±0.5% of reading + 0.001 mS/cm
Salinity	0 to 70 ppt	0.01 ppt	±1% of reading or 0.1 ppt, whichever is greater
Temperature	-5 to +50°C	0.01°C	±0.15°C
Depth Medium Shallow Vented Level	0 to 30 ft, 9.1 m	0.001 ft, 0.001 m 0.001 ft, 0.001 m 0.001 ft, 0.001 m	±0.4 ft, ±0.12 m ±0.06 ft, ±0.02 m ±0.01 ft, 0.003 m
Turbidity* 6136 Sensor*	0 to 1,000 NTU	0.1 NTU	±2% of reading or 0.3 NTU, whichever is greater
Rhodamine* ET	0-200 μg/L	0.1 μg/L	±5% reading or 1 μg/L, whichever is greater

• Maximum depth rating for all optical probes is 200 feet, 61 m.

\*\*In YSI AMCO-AEPA Polymer Standards.

	Range	Detection Limit	Resolution	Linearity
BGA - Phycocyanin*	~0 to 280,000 cells/mL <sup>†</sup> 0 to 100 RFU	~220 cells/mL§	1 cell/mL 0.1 RFU	R <sup>2</sup> > 0.9999**
BGA - Phycoerythrin*	~0 to 200,000 cells/mL <sup>†</sup> 0 to 100 RFU	~450 cells/mL <sup>§§</sup>	1 cell/mL 0.1 RFU	R <sup>2</sup> > 0.9999***
Chlorophyll* 6025 Sensor* ET✔	~0 to 400 µg/L 0 to 100 RFU	~0.1 μg/L <sup>§§§</sup>	0.1 μg/L Chl 0.1% RFU	R <sup>2</sup> > 0.9999****
Maximum depth rating for all optical probes is 200 feet, 61 m. BGA = Blue-Green Algae RFU = Relative Fluorescence Units ~ = Approximately	† Explanation of Ranges can be found in the 'Principles of Operation' section of the 6-Series Manual, Rev D.	\$ Estimated from cultures of <i>Microcystis aeruginosa</i> .  \$\$ Estimated from cultures <i>Synechococcus sp.</i> \$\$\$ Determined from cultures of <i>Isochrysis sp.</i> and chlorophyll <i>a</i> concentration determined via extractions.		**Relative to serial dilution of Rhodamine WT (0-400 ug/L). ***Relative to serial dilution of Rhodamine WT (0-8 ug/L). ****Relative to serial dilution of Rhodamine WT (0-500 ug/L).

### YSI 600OMS VZ Sonde Specifications

Medium	Fresh, sea or polluted water
Length	21.3 in, 54.1 cm 1.3 lbs, 0.6 kg
	12 V DC 4 AA Alkaline cells, 25 to 30 days at 15 minute sampling interval at 25°C

#### **Ordering Information**

600-01	600OMS <b>V2</b> sonde, conductivity, temperature, optical port		
600-02	600OMS <b>VZ</b> sonde, conductivity, temperature, optical port, internal batteries		
600-03	600OMS <b>VZ</b> sonde, conductivity, temperature, optical port, shallow depth		
600-04	600OMS <b>VZ</b> sonde, conductivity, temperature, optical port, shallow depth, internal batteries		
600-05	600OMS <b>VZ</b> sonde, conductivity, temperature, optical port, medium depth		
600-06	600OMS <b>VZ</b> sonde, conductivity, temperature, optical port, medium depth, internal batteries		
600-07	600OMS VZ sonde, conductivity, temperature, optical port, shallow vented depth		
600-08	600OMS <b>VZ</b> sonde, conductivity, temperature, optical port, shallow vented depth, internal batteries		

Report outputs of specific conductance (conductivity corrected to 25° C), resistivity, and total dissolved solids are also provided. These values are automatically calculated from conductivity according to algorithms found in Standard Methods for the Examination of Water and Wastewater (ed 1989).



# We represent this supplier. For more information contact Observator Instruments:

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