YSI Environmental



Lab Unlimited

Distributed by:

Tallaght Business Park Whitestown Dublin 24 Ireland

Web: www.labunlimited.com

Tel: (01) 4523432

Fax: (01) 4523967

Unit 59. Frimley House 35 High Street Frimley, Surrey **GU16 7JQ**

Tel: 08452 30 40 30 Fax: 08452 30 50 30 E-mail: info@labunlimited.com E-mail: info@labunlimited.co.uk Web: www.labunlimited.co.uk

YSI 6600 VZ Sonde

With 2 or 4 optical ports and new sensor options

Make the most of your environmental monitoring efforts: The 6600 VZ sonde offers the most comprehensive water quality monitoring package available with simultaneous measurement of conductivity (salinity), temperature, depth or level, pH/ORP. The 6600 VZ-4 also measures these parameters: dissolved oxygen, turbidity, chlorophyll, and blue-green algae; the V2-2 measures two of the four parameters simultaneously. Additional calculated parameters include total dissolved solids, resistivity, and specific conductance.

Take advantage of YSI's new optical sensor design and anti-fouling wiper control for improved reliability during extended deployments.

- Self-cleaning optical sensors with integrated wipers remove biofouling and maintain high data accuracy
 - Field-replaceable sensors make trips to the field quick
 - Optimal power management and built-in battery compartment extends in situ monitoring periods

Take Advantage of YSI's New Optical Sensors

In addition to turbidity, chlorophyll, and rhodamine, YSI now offers these optical sensors:

ROX Reliable Optical Dissolved Oxygen

The ROX sensor uses lifetime luminescence detection technology to offer the most reliable oxygen sensor with the lowest possible maintenance effort. The sensor is insensitive to hydrogen sulfide interference and does not require regular membrane changes.



YSI's fluorescence-based blue-green algae sensors will allow you to monitor bluegreen algae populations where their presence is a concern. Whether providing an early warning to an algal bloom, tracking taste and odor-causing species in drinking water supplies, or conducting ecosystem research, YSI BGA sensors will provide sensitive and reliable in situ data.

Sensor performance verified*

The 6600 VZ 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.



6600 Upgrades Available

YSI is committed to offering our customers reliable and cost-effective water monitoring solutions. To this end, we are offering VZ Upgrades for existing 6600s. Upgrades will be available from YSI Authorized Service Centers and will include the new 6600 VZ bulkhead, a ROX Optical Dissolved Oxygen Sensor, and firmware/ software upgrades. In addition, the sonde will be fully tested and calibrated by an experienced YSI service technician.

Complete Data Record

The YSI 6600 VZ-4 Sonde, with 4 optical sensor ports, is the <u>only</u> instrument available to simultaneously measure dissolved oxygen, turbidity, chlorophyll, and blue-green algae!



Upgraded sondes for rugged long-term deployment





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

+1 937 767 7241 800 897 4151 (US) www.ysi.com

YSI Environmental +1 937 767 7241 Fax +1 937 767 9353 environmental@ysi.com

YSI Integrated Systems & Service +1 508 748 0366 systems@ysi.com

SonTek/YSI +1 858 546 8327 inquiry@sontek.com

YSI Gulf Coast +1 225 753 2650 gulfcoast@ysi.com

YSI Hydrodata (UK) +44 1462 673 581 europe@ysi.com

YSI Middle East (Bahrain) +973 39771055 halsalem@ysi.com

YSI South Asia +91 124 435 4213 sham@ysi.com

YSI Hong Kong +852 2891 8154 hongkong@ysi.com

YSI China +86 10 8571 1975 beijing@ysi-china.com

YSI Nanotech (Japan) +81 44 222 0009 nanotech@ysi.com

YSI Australia +61 7 3162 1064 australia@ysi.com

ISO 9001 ISO 14001 Yellow Springs, Ohio Facility

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"sensors with listed with ETV logo were submitted to the E program on the YSI 6600EDS. Information on performan-characteristics of YSI water quality sensors can be found at we epagoviety. or call YSI at 800.897.4151 for the ETV verificati report. Use of ETV name or logo does not imply approal certification of this product nor does it make any explicit implied warranties or guarantees as to product performance.

YSI incorporated Who's **Minding** the Planet?

YSI 6600 VZ Sensor Specifications							
	Range	Resolution	Accuracy				
ROX™ 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™ 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				
Dissolved Oxygen** % Saturation 6562 Rapid Pulse [™] Sensor*	0 to 500%	0.1%	0 to 200%: $\pm 2\%$ of reading or 2% air saturation, whichever is greater; 200 to 500%: $\pm 6\%$ of reading				
Dissolved Oxygen" mg/L 6562 Rapid Pulse [™] Sensor*	0 to 50 mg/L	0.01 mg/L	0 to 20 mg/L: \pm 0.2 mg/L or 2% of reading, whichever is greater; 20 to 50 mg/L: \pm 6% of reading				
Conductivity*** 6560 Sensor*	/ 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	$\pm 1\%$ of reading or 0.1 ppt, which ever is greater				
Temperature 6560 Sensor*	-5 to +50°C	0.01°C	±0.15°C				
pH 6561 Sensor* ETV	0 to 14 units	0.01 unit	±0.2 unit				
ORP	-999 to +999 mV	0.1 mV	±20 mV				
Depth Dee Mediu Shallo Vented Lev	op 0 to 656 ft, 200 m m 0 to 200 ft, 61 m w 0 to 30 ft, 9.1 m el 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 0.001 ft, 0.001 m	±1 ft, ±0.3 m ±0.4 ft, ±0.12 m ±0.06 ft, ±0.02 m ±0.01 ft, 0.003 m				
Turbidity* 6136 Sensor* ETV	0 to 1,000 NTU	0.1 NTU	$\pm 2\%$ of reading or 0.3 NTU, whichever is greater"				
Nitrate/nitrogen****	0 to 200 mg/L-N	0.001 to 1 mg/L-N (range dependent)	$\pm 10\%$ of reading or 2 mg/L, which ever is greater				
Ammonium/ammonia/ nitrogen****	0 to 200 mg/L-N	0.001 to 1 mg/L-N (range dependent)	$\pm 10\%$ of reading or 2 mg/L, which ever is greater				
Chloride****	0 to 1000 mg/L	0.001 to 1 mg/L (range dependent)	$\pm 15\%$ of reading or 5 mg/L, which ever is greater				
Rhodamine*	0-200 μg/L	0.1 μg/L	$\pm 5\%$ reading or 1 µg/L, which ever is greater				
Maximum donth nating for all ontical	es is 200 feet 61 m. Turbidity and Rhodamine are also available in a Deep		**Le VCI AMCO AEDA Delene es Cher de de				

Depth option (0 to 200 m). •• Rapid Pulse is only available on 6600 V2-2 (two optical ports version).

••• 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). •••• Freshwater only. Maximum depth rating of 50 feet, 15.2 m. 6600 V2-2 has 3 ISE ports; not available on the 6600V2-4.

	Range	Detection Limit	Resolution	Linearity
Blue-Green Algae Phycocyanin*	~0 to 280,000 cells/mL [†] 0 to 100 RFU	~220 cells/mL§	1 cell/mL 0.1 RFU	R ² > 0.99999**
Blue-Green Algae Phycoerythrin*	~0 to 200,000 cells/mL [†] 0 to 100 RFU	~450 cells/mL ^{§§}	1 cell/mL 0.1 RFU	R ² > 0.99999***
Chlorophyll [•] 6025 Sensor [*]	~0 to 400 μg/L 0 to 100 RFU	~0.1 µg/L ^{\$\$\$}	0.1 μg/L Chl 0.1% RFU	R ² > 0.9999****
• Maximum depth rating for all optical probes is 200 feet, 61 m. Also available in a Deep Depth option (0 to 200 m). RFU = Relative Fluorescence Units	† Explanation of Ranges can be found in the 'Principles of Operation' section of the 6-Series Manual, Rev D.	§ Estimated from cultures of Microcystis aeruginosa. §§ Estimated from cultures Synechococcus sp. §§§ Determined from cultures of Isochrysis sp. and chlorophyll a concentration determined via extractions.		**For serial dilution of Rhodamine WT (0-400 ug/L). ***For serial dilution of Rhodamine WT (0-8 µg/L). ****For serial dilution of Rhodamine WT (0-500 ug/L).

YSI 6600 VZ Sonde Specifications

	Medium	Fresh, sea or polluted water	Software	EcoWatch*
TV ice rw. on or	Temperature Operating Storage	-5 to +50°C -10 to +60°C	Dimensions Diameter Length, no depth Length, with depth Weight	3.5 in, 8.9 cm 19.6 in, 49.8 cm 21.6 in, 54.9 cm 7 lbs, 3.18 kg (batteries installed, with depth)
	Communications	RS-232, SDI-12	Power External	12 V DC 8 C-size alkaline batteries