YSI Environmental

YSI 6820 and 6920 V2 Sondes

With 2 optical ports and new sensor options

The YSI 6820 V2 and 6920 V2 Sondes

Measure multiple parameters simultaneously including:

- Temperature
- Conductivity
- Specific Conductance
- Salinity
- Resistivity
- TDS
- pH
- ORP
- Depth or Level
- Nitrate, Ammonium or Chloride

And 2 of the following optical sensors:

- ROX Optical DO ***NEW***
- Turbidity
- Chlorophyll
- Blue-Green Algae ***NEW***
  (Phycocyanin or Phycoerythrin)
- Rhodamine

- **Self-cleaning optical sensors with improved wiping**
- **Field-replaceable sensors**
- **6920 V2 has a built-in battery compartment for long-term *in situ* monitoring**

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. Experience significantly less membrane maintenance while obtaining excellent accuracy, sensitivity and range.

ROX

Blue-Green Algae (BGA)

YSI's fluorescence-based blue-green algae sensors will allow you to monitor blue-green 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.

Pure Data for a Healthy Planet.®

Upgraded, compact sondes for field sampling and data collection platforms

6820 and 6920 Upgrades Available

YSI is committed to offering our customers reliable and cost-effective water monitoring solutions. To this end, we are offering V2 Upgrades for existing 6820/6920s. Upgrades will be available from YSI Authorized Service Centers and will include the new 6820/6920 V2 bulkhead, an Optical Dissolved Oxygen Sensor, and firmware/software upgrades. In addition, the sonde will be fully tested and calibrated by an experienced YSI service technician.

Sensor performance verified*

ETV

The 6820 V2 and 6920 V2 sondes use 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.

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YSI 6820 V2 & 6920 V2 Sensor Specifications

	Range	Resolution	Accuracy
Optical Dissolved Oxygen• % Saturation	0 to 500%	0.1%	0 to 200%: ±1% of reading or 1% air saturation, whichever is greater; 200 to 500%: ±15% of reading
Optical Dissolved Oxygen• mg/L	0 to 50 mg/L	0.01 mg/L	0 to 20 mg/L: ± 0.1 mg/L or 1% of reading, whichever is greater; 20 to 50 mg/L: ±15% of reading
Conductivity•• 6560 Sensor ETV	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 6560 Sensor ETV	-5 to +70°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			
Vented Level	0 to 30 feet, 0 to 9 m	0.001 feet, 0.0003 m	±0.01 feet, 0.003 m
Shallow	0 to 30 feet, 0 to 9 m	0.001 feet, 0.0003 m	±0.06 feet, ±0.02 m
Medium	0 to 200 feet, 0 to 61 m	0.001 feet, 0.001 m	±0.4 feet, ±0.12 m
Turbidity• 6136 Sensor ETV	0 to 1,000 NTU	0.1 NTU	±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)	±10% of reading or 2 mg/L, whichever is greater
Ammonium/ammonia/ nitrogen•••	0 to 200 mg/L-N	0.001 to 1 mg/L-N (range dependent)	±10% of reading or 2 mg/L, whichever is greater
Chloride•••	0 to 1000 mg/L	0.001 to 1 mg/L (range dependent)	±15% of reading or 5 mg/L, whichever is greater
Chlorophyll• 6025 Sensor ETV	0 to 400 µg/L	0.1 µg/L Chl; 0.1% FS	
Rhodamine•	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, 60.96 m.
••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.

† Sensor only. Operating temperature of sonde is -5 to 45° C.
‡ In YSI AMCO-AEPA Polymer Standards.

	Range•	Detection Limit•	Linearity•
BGA - Phycocyanin•	0-200,000 cells/mL†	150 cells/mL§	R^2 = 0.9999* R^2 = 0.999**
BGA - Phycoerythrin•	0-200,000 cells/mL‡	400 cells/mL§§	R^2 = 0.99994***

• Maximum depth rating for all optical probes is 200 feet, 60.96 m. Preliminary Specifications.

† Estimated from cultures of *Microcystis aeruginosa*.
‡ Estimated from cultures of PE containing blue-green algae.

§ Estimated from cultures of *Microcystis aeruginosa*.
§§ Estimated from cultures of PE containing blue-green algae.

*Relative to serial dilution of Rhodamine WT (0-400 ug/L).
**Relative to serial dilution of *Microcystis aeruginosa* cultures (0-200,000 cells/mL).
*** Relative to serial dilution of Rhodamine WT (0-8 µg/L).

YSI 6820 V2 & 6920 V2 Sonde Specifications

	6820 V2	6920 V2
Medium	Fresh, sea or polluted water	Fresh, sea or polluted water
Temperature	-5 to +45°C	-5 to +45°C
Communications	RS-232, SDI-12	RS-232, SDI-12
Software	EcoWatch®	EcoWatch®
Dimensions		
Diameter	2.86 in, 7.3 cm	2.85 in, 7.24 cm
Length	13.5 in, 34.3 cm	18 in, 45.7 cm
Weight	3.4 lbs, 2.3 kg	4 lbs, 1.8 kg (batteries installed)
Power	External only, 12 V DC	Internal: 8 AA-size alkaline batteries External: 12 V DC

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

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CE

*Sensors with listed with the ETV logo were submitted to the ETV program on the YSI 6600EDS. Information on the performance characteristics of YSI water quality sensors can be found at www.epa.gov/etv, or call YSI at 800.897.4151 for the ETV verification 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.

YSI incorporated
Who's Minding the Planet?®