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Why Choose YSI?

- 60 years of applications knowledge
- 94% overall customer satisfaction rating
- Rugged, multiparameter instruments
- High quality data
- On-site technical experts around the world
- Excellent customer support
- Reliability makes your job easier
- Value: Lowest overall cost for the best solution that meets your needs

ISO 9001
ISO 14001

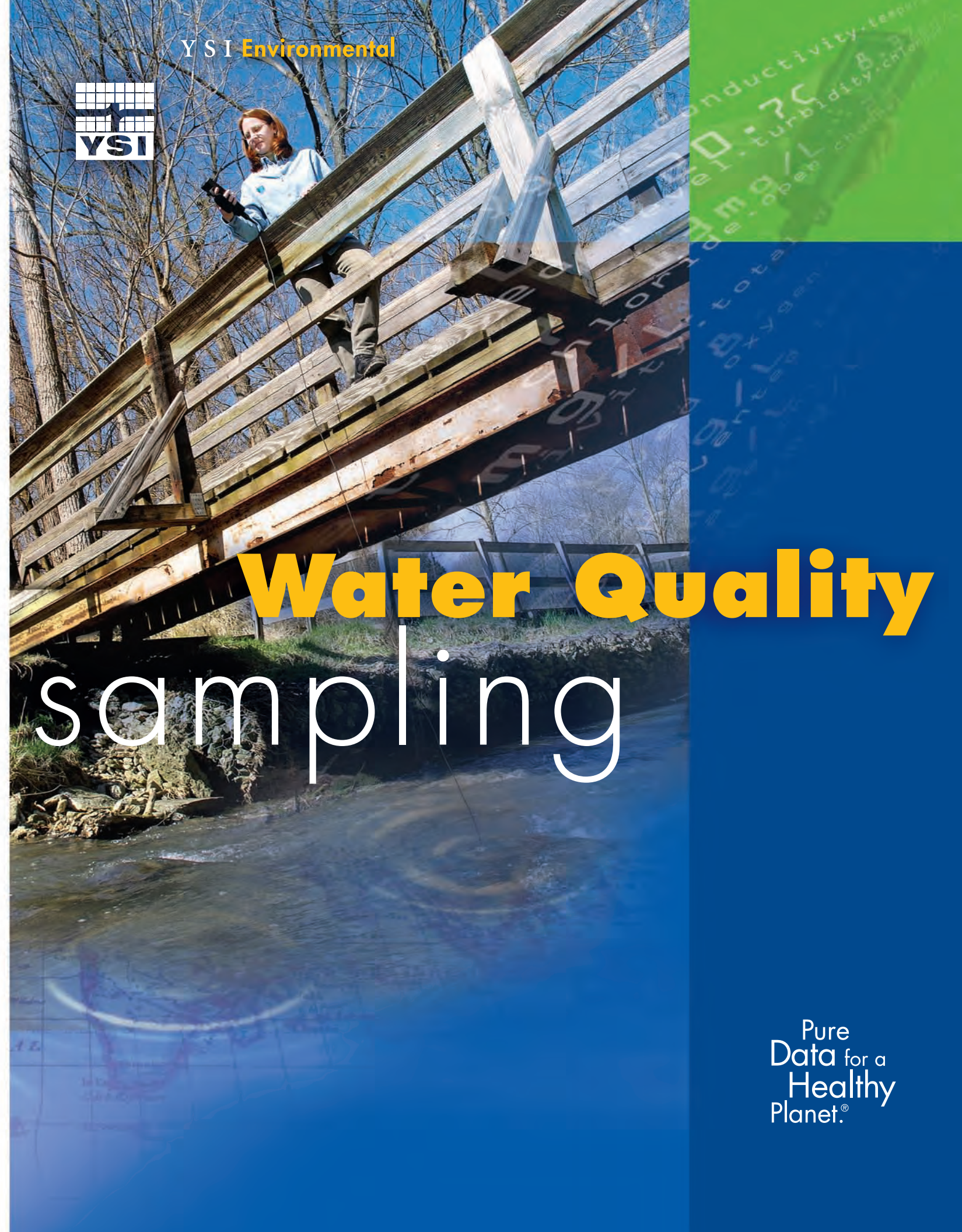
(Yellow Springs facility)

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the Planet?®

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YSI, Inc. saved the following resources by using New Leaf Reincarnation made with 100% recycled fiber, 50% post-consumer waste, and processed chlorine free.				
trees	water	energy	solid waste	greenhouse gases
8 fully grown	1,661 gallons	3 million BTUs	363 pounds	614 pounds
Calculation based on research by Environmental Defense and other members of the Paper Task Force. ©2006 New Leaf Paper www.newleafpaper.com 888.989.5323				



Water Quality
sampling



Surface water Beverages Wastewater Industrial Aquaculture

YSI Locations Worldwide

- 1 San Diego, California, USA
- 2 Baton Rouge, Louisiana, USA
- 3 St. Petersburg, Florida, USA
- 4 Yellow Springs, Ohio, USA
- 5 Marion, Massachusetts, USA
- 6 Athboy, County Meath, Ireland
- 7 Hertfordshire, England
- 8 Manama, Kingdom of Bahrain
- 9 Tokyo, Japan
- 10 Kawasaki City, Japan
- 11 Beijing, China
- 12 Qingdao, China
- 13 Shanghai, China
- 14 Hong Kong, China

Technologies for lab & field

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Around the world our customers use YSI instruments to make a positive impact.

We help you meet your critical water testing requirements through our core competency of sensor technology as well as the most extensive distribution and support network in the industry.

Financial advantages include the low overall cost of ownership of a YSI product due to quality engineering, infrequent down time and repairs, and affordable parts.

Yet the number one advantage in working with YSI is direct access to our employees – knowledgeable, customer-focused technical and applications advisors committed to helping you find new and better ways to use YSI equipment.

Thank you for your interest in our company. Together we can protect our planet's most valuable natural resource.

Timothy A. Grooms

Tim Grooms
Water Quality
Product Manager



Multiparameter instrument

accessories

YSI's 556 Multiparameter instrument is engineered to deliver accurate measurements in a compact package. It's packed with features that make your work easier and more convenient; such as fast response, easy calibration, easy-to-read backlit display, waterproof case, large memory capacity, one-hand operation, and a storage chamber to keep probes safe.



YSI 556 MPS An easy-to-use and easy-to-read handheld unit with all the functionality of a complex multiparameter system. Featuring an IP67 waterproof, impact-resistant case, the YSI 556 Multiprobe System simultaneously displays dissolved oxygen, pH, conductivity, temperature, ORP, salinity, and TDS. Barometer is optional. With 512K memory, the instrument can store up to 49,000 data sets with time and date stamp. Compatible with EcoWatch® for Windows® data analysis software. GLP conforming. Available with 4, 10, and 20 m cables.



DO

Conductivity/Temp

pH/ORP



5080 Carrying Case (optional)

- rugged, waterproof, hard Pelican™ case
- high-impact protective foam insert
- foam cutouts for instrument and DO probe accessories
- carved pocket for manual

5061 Soft Carrying Case (standard) comes with 556

YSI 556 MPS shown with 5083 flow cell for groundwater applications and Confidence Solution

screw-on 5083 flow cell
flow cell dismantling/disassembly simple for easy clean up

large LCD for multiple parameter readings

easy-to use keypad

IP67 waterproof case

waterproof connector

Confidence Solution



More accessories on page 7
Handheld classics on page 12

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Applications

Surface water, Groundwater, Wastewater

Parameters

DO, pH, Temperature, ORP, Conductivity

Low Flow Sampling in Ground Water

The most common method of sampling ground water is accomplished by purging 3-5 casing volumes.

Stabilization of parameters such as pH, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), temperature, and turbidity should be used to determine when formation water is accessed during purging. The order of stabilization is pH, temperature, and specific conductance, followed by ORP, DO, and turbidity.

Instruments such as the YSI 556 instrument can simultaneously measure parameters while utilizing a flow cell for continuous data.

Many state agencies encourage the use of low flow sampling because it collects a sample that most truly represents the water in the screened section of the aquifer surrounding the monitoring well. It does not come from water that is mixed within the well by a bailer or inertial sampler, nor does it come from an average of water that flowed the full length of a long screened interval.



Dissolved Oxygen classics

YSI Classics — portable, easy-to-use, and rugged — are versatile instruments for lab and field that continue to satisfy customers worldwide.



YSI 52 DO Meter

The portable YSI 52 is easy to use for field and lab work. Internal memory stores up to 70 readings. An easy-to-read LCD provides clear, simultaneous display of time, temperature, and % and mg/L oxygen. Standard RS-232 port with communications software provides PC connectivity. Six D cell batteries provide hours of operation. Packaged in a water-resistant case.



YSI 58 DO Meter

The YSI 58 DO instrument displays oxygen concentrations in two temperature-compensated modes on an LCD. With broad ranges, this meter is especially convenient for measuring super-saturated water, such as samples with oxygen-producing algae. The instrument offers manual salinity correction, recorder output, and operation from line power or batteries. The case also holds batteries for an optional field stirrer.



YSI 550A

YSI 550A Waterproof, rugged, and reliable, the YSI 550A is designed for the field with innovative field-replaceable DO electrodes, over 2,000 hours battery life, CE compliance, a 3-year warranty on the instrument, and a 1-year warranty on the replaceable electrodes. Measure temperature and dissolved oxygen simultaneously, and replace the DO electrode quickly and easily. Uses easy-to-install cap membranes.

IP67 waterproof case

Large LCD with backlight

Longer cable lengths of 12, 25, 50 or 100 feet (3.7, 7.6, 15.2 or 30.5 meters)

Easy-to-use keypad

Adjustable handstrap

Improved cable durability

Expanded DO range of 0-50 mg/L and salinity range of 0-70 ppt

PE membranes for faster response and less stirring

Cases & accessories

Applications

Surface water, Beverages, Wastewater, Aquaculture

Parameters

DO, Temperature

We offer a full line of soft cases and waterproof, impact-resistant hard cases. Our hands-free harness or shoulder strap allows you to move more freely in the field. And our c-clamp and tripod enable you to safely and reliably secure your instruments. Whatever your need, YSI accessories enhance the value of your investment.*

 <p>5085 Hands-free harness (for 556 and 550A)</p>	 <p>614 C-clamp (for 556 and 550A)</p>	 <p>4654 Tripod (for 556 and 550A)</p>
 <p>5065 Form-fitting case with shoulder strap (for 556 and 550A)</p>	 <p>5083 Flow cell (for 556)</p>	 <p>5060 5061 Carrying Cases</p>
 <p>5905 and 5750 BOD Probes (for 52 and 58)</p>	 <p>5740 Cable Assemblies for 5739 Field DO Probes (for 52 and 58)</p>	 <p>5239 Field Probe (for 52 and 58)</p>

* For a full list of accessories, visit www.YSI.com/accessories

Dissolved Oxygen Laboratory

Save time and increase efficiency with the YSI 5000 Series. These microprocessor-based lab instruments store 100 sets of data and are equipped with an RS-232 interface for direct link to your computer. They can be upgraded via disk or YSI's website — eliminating the need to ship units back to YSI. Features auto-calibration, large graphic display, and low-profile keypad.



YSI 5100 DO Meter Receive ultimate performance and flexibility with auto-calibration and built-in OUR/SOUR* software — valuable process control tools for indicating the biological activity of microorganisms used in treatments.

- Built-in barometer for pressure-compensated calibration
- Programmable auto-stabilization
- Integrity function indicates membrane damage
- Bar code compatibility eliminates need to maintain bench sheets by hand
- BOD Analyst™ for Windows®
- Real-time clock
- RS-232

YSI 5000 DO Meter Ease of use is highlighted by menu-driven operation; a large, liquid-crystal display; the use of auto-stabilization to predetermine a stable reading; and audio and tactile keypad responses for reducing errors and uncertainty. And with YSI BOD Analyst™ for Windows®, you can perform BOD calculations and transfer control to your computer's keypad.

* The Specific Oxygen Uptake Rate (SOUR) is the method many wastewater treatment plants use to show compliance with U.S. EPA regulations part 503 for vector attraction in biosolids. Many plants now use both SOUR and Oxygen Uptake Rate (OUR) for process control.

accessories

Dissolved Oxygen Accessories

Enhance productivity in the lab with tools and accessories for YSI's lab instruments.*



YSI 5906

The YSI 5010 Self-Stirring BOD Probe

The YSI 5010 provides continuous stirring for accurate measurement and faster response time.

International BOD probes are available. Contact your YSI Dealer for information.

YSI 5750 Non-Stirring BOD Probe

Fits standard 300mL BOD bottles. Comes with a 5-foot (1.5m) cable and connects to any YSI classic grey box DO meter or to the 5000 series meter with the YSI 5011 adapter.



YSI 5010



YSI 5010-W
Wine bottle probe



Applications

Beverages, Surface water, Wastewater

Parameters

DO, Temperature

World-class winery measures DO with YSI

Although oxygen is necessary in wine aging, it can harm overall quality. Too much oxygen causes browning of white wines and degrades flavor in both reds and whites. J. Lohr Winery in San Jose minimizes the amount of oxygen exposure to their premium wines using the YSI 550A, 5100, and 5010-W.

To determine the amount of oxygen introduced when wine is moved, laboratory staff use the YSI 550A to check all oak barrels and stainless steel storage tanks. The data allows them to examine potential sources of oxygen introduction and make immediate adjustments for preserving the wine's integrity.

Lab staff then use the YSI Model 5100 to ensure minimal oxygen introduction from tank to bottling filler. Connected to the 5100 is the YSI Model 5010-W wine bottle probe. The six-inch probe fits directly into the neck of a wine bottle. The probe's self-powered stirrer is attached to the submersible end to ensure a good flow of wine past the membrane.

Careful inspection using YSI instruments help J. Lohr Winery produce varietals that compete with the finest in the world.



Conductivity Laboratory

Ensure the most accurate measurements with YSI benchtop conductivity instruments featuring NIST-traceable conductivity cells with built-in temperature sensors. Instruments offer easy-to-fill cells, easy-to-read LCD displays, and exceed USP24 specifications.



YSI 3100

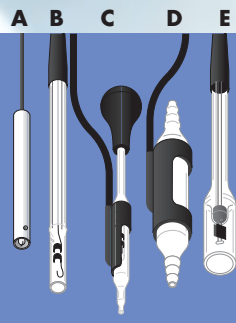
YSI 3200

YSI 3100 Conductivity Meter High-accuracy measurements for basic conductivity needs. Uses forced-current technology. Includes direct-reading digital display, adjustable temperature coefficient, and automatic temperature compensation. Measurements include:

- Conductivity
- Salinity
- Temperature

YSI 3200 Conductivity Meter Get unmatched accuracy for ultrapure water in demanding applications such as pharmaceuticals and clean rooms. Multi-point calibration lets you measure a variety of samples with the same cell. Also features high/low alarms for process applications and exclusive Resistance Ratio Technology™. Measurements include:

- Conductivity
- Resistivity
- Salinity
- Total Dissolved Solids
- Temperature



	Model	Cell Type	S.I. Cell Constant	Cell Constant	Material	Overall Length	Max O.D.	Chamber I.D.	Chamber Depth	Volume	Conductivity
A	3252	dip	1.0/cm	100/m	ABS plastic	146 mm	13 mm	10 mm	20 mm		0 – 1,000 ms/cm
B	3253	dip, micro	1.0/cm	100/m	Pyrex 7740	178 mm	13 mm	10 mm	51 mm		10 – 100 us/cm
C	3254	fill	1.0/cm	100/m	Pyrex 7740	135 mm	19 mm	11 mm	83 mm	5 mL	25 – 1,000 ms/cm
D	3255	flow	0.1/cm	10/m	Pyrex 7740	146 mm	25 mm	21 mm	76 mm	30 mL	1.0 us/cm – 25 ms/cm
E	3256	dip	0.1/cm	10/m	Pyrex 7740	159 mm	25 mm	21 mm	52 mm		0 – 25 ms/cm

accessories

YSI carries a full line of accessories (conductivity cells, calibration solutions, and resistor sets) for its conductivity instruments and applications.*



NIST-Traceable Resistor Sets More precise than common resistors and able to optimize instrument performance, the YSI 3166 Resistor Sets are characterized for AC and DC, and are mounted on banana plugs for easy use.

NIST-Traceable Conductivity Cells YSI conductivity cells are traceable to the U.S. Department of Commerce's National Institute of Standards & Technology. Conductivity cells feature built-in temperature sensors and come in three styles: fill, dip, and flow-through. YSI 32 Series cells connect directly to the YSI 3100 and 3200 conductivity meters. YSI 34 Series cells require the YSI 3232 cell adaptor to connect to the 3100 and 3200.



NIST-Traceable Conductivity Solutions Calibrate your conductivity cells and meters together for maximum accuracy. Quality control and quality assurance while calibrating conductivity are more easily documented because solutions are traced back to NIST standards. Solutions will calibrate YSI Pro30, Pro2030, Pro1030, and other handhelds, YSI 3100 and 3200 meters, and any other instruments that measure conductivity.

Solutions are available in nominal values of 1,000; 10,000; 50,000; and 100,000 µS/cm at 25°C. Bottles are packaged with a table of corrections at temperatures between 20° and 30°C. At 25°C, YSI 3161 solution has a tolerance of +0.50%; YSI 3163 and 3165 a tolerance of +0.25%, and YSI 3167-3169 a tolerance of +1.0%.

YSI 3161 1,000 µS/cm quart	YSI 3167 1,000 µS/cm 8 pints
YSI 3163 10,000 µS/cm quart	YSI 3168 10,000 µS/cm 8 pints
YSI 3165 100,000 µS/cm quart	YSI 3169 50,000 µS/cm 8 pints

Applications
Industrial, Pharmaceutical,
Education, Wastewater

Parameters
Conductivity

Ultrapure Water

The importance of ultrapure water is clearly understood for applications such as pharmaceutical, laboratory, cosmetics, plating, medical, and industrial processes.

Several treatments are available, depending on certain requirements for the water. Common methods for treatment are activated carbon filters, reverse osmosis, ultraviolet, distillation, and ion exchange or deionization. However, regardless of the treatment method chosen, the water must ultimately be monitored.

The most common measurement is conductivity; the measurement of a solution's ability to carry electrical current. All substances possess conductivity, but the degree depends on the presence of conductive ions.

Resistivity, the reciprocal of conductivity, is the industry standard for measuring ultrapure water. Ultrapure water is a very poor conductor of electrical current due to the absence of conductive ions.

Since temperature greatly affects ionization, conductivity and resistivity measurements are temperature dependent. Temperature compensation varies with concentration and temperature in a non-linear curve. Due to this, some applications require uncompensated measurements. High-end instruments like the YSI 3200 allow for the storage of non-linear curves and the ability to disable temperature compensation.



Handheld instruments

YSI's full line of handheld instruments is engineered to deliver accurate measurements in a package full of features to make your work easier and more convenient. Each instrument features fast response, easy calibration, easy-to-read backlit display, water-resistant case, automatic function check, one-hand operation, and a storage chamber to keep probes safe.



YSI 30/YSI 30M measures salinity, conductivity, and temperature with a super-stable 4-electrode conductivity cell and user-selected scale or autoranging for conductivity. The YSI 30M also comes with a 50-reading memory with ID, and 10-, 25-, 50-, and 100-foot cables (3, 7.6, 15.2, and 30.5 m).



YSI 63 measures temperature, pH, conductivity, and salinity with 50-reading memory with ID, super-stable 4-electrode conductivity cells, field-replaceable pH electrode, a 2-year warranty (pH electrode module, 1-year), user-selected scale or autoranging for conductivity, and up to 100-foot cable due to YSI's Driven-Guard technology.



YSI 60 measures temperature and pH with field-replaceable pH electrode, 50-reading memory, a 2-year warranty (pH electrode module, 1-year), and up to 100-foot cable due to YSI's Driven-Guard technology. 10-, 25-, 50-, and 100-foot cables (3, 7.6, 15.2, and 30.5 m).



YSI 55 features dissolved oxygen in mg/L or % oxygen. Push-button calibration, a built-in calibration chamber, and direct salinity and altitude compensation. Readings are automatically compensated for temperature. Cable options include 12-, 25-, and 50-foot lengths (3.7, 7.6, and 15.2 m).



YSI 85 offers simultaneous dissolved oxygen, conductivity, salinity, and temperature measurement. For data-logging applications, the unit stores up to 50 data sets in non-volatile memory with ID. Features include easy-to-install, screw-on cap membranes; automatic salinity compensation for DO; autoranging for fast, accurate conductivity measurement; and a super-stable 4-electrode conductivity cell.

www.YSIEcoSense.com

Visit www.YSIEcoSense.com for additional handheld sampling instruments and pen-style sampling instruments.



YSI is an employee-owned company that designs, manufactures, and supports a full line of sensor technology, instruments, and real-time systems for the global environmental market.

Around the world YSI customers are finding creative ways to incorporate our equipment into their daily processes. From shrimp farms in Indonesia to waste water treatment plants in North America, YSI is a valued, single-source supplier of equipment and systems to monitor, analyze, and control the world's important ecosystems.

Founded in 1948, YSI is an ISO 9001 and ISO 14001 certified company deeply committed to the worldwide challenge for innovative thinking, practices, and technology that will contribute to environmental sustainability.

If you have a story or application note, let YSI Customer Service know by sending an email to environmental@ysi.com. Or call one of our knowledgeable technical support representatives:

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