YSI 2900 Series Biochemistry Analyzers

BIOPROCESS FOOD & BEVERAGE BIOFUELS MEDICAL RESEARCH

YSI
a xylem brand

Life Sciences
Data for Life.™

Fast and Accurate: The YSI Gold Standard

YSI has earned a reputation as the bio-analytical Gold Standard, due to our highly accurate biosensor technology and ability to produce rapid results.

The key to generating analyte-specific results in 60 seconds or less is YSI's innovative biosensor technology. Using the inherent specificity of enzymes for a single target analyte, YSI's proprietary immobilized enzyme electrodes allow a rapid, accurate, and largely interference-free measurement to be made in about a minute. The unique fluidics and chamber design resist clogging – even at high cell densities.

Combining trusted measurement technology with the latest in automated sample handling, the YSI 2900 furthers YSI's legacy of expertise in the following applications:

- Bioprocess monitoring and control
- Food & beverage processing and QC
- Biofuel production and research
- Medical and sports physiology research

Fully modular and with a range of upgrades available, the YSI 2900 and 2950 feature an intuitive graphical user interface and a touch screen display. This makes 2900 Series analyzers the easiest to use and most cost effective way to measure the following chemistries in a wide range of applications:

Glucose	Ammonium*	Methanol	Choline
Lactate	Potassium*	Sucrose	Glycerol
Glutamine	Xylose	Galactose	Hydrogen peroxide
Glutamate	Ethanol	Lactose	

*YSI 2950

YSI 2900

Biochemistry Analyzer

EAGLE Registrations Inc.
SERVICE • INTEGRITY • VALUE

YSI's quality management system is registered:
ISO 9001: 2008 and ISO 14001: 2004.

Versatile
Measure >10 chemistries – each in under 1 minute

Analyte-specific results
Even in complex matrices

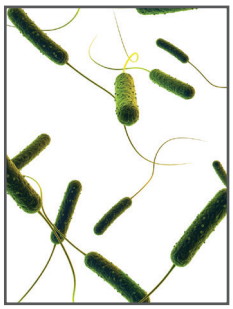
Modular
Expandable from 2 to 6 chemistries with the YSI 2950

Anti-clogging fluidics and chamber design
Measure high cell density samples with ease

Applications and Measurement Expertise

A wide range of application notes is available online for download.

Bioprocess Monitoring

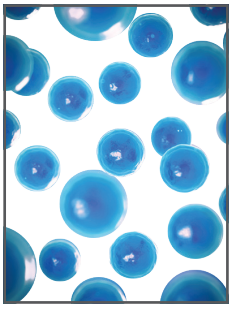


Bioreactor glucose and lactate. YSI analyzers are an essential part of many stages of bioprocessing, including: R&D, process optimization, scale-up and production. Our analyzers provide critical off-line and on-line process analysis for biopharmaceutical, biofuel, and other industrial biotechnology manufacturing processes.

Food and Beverage

For years, food technologists have trusted YSI Biochemistry Analyzers for ensuring food and beverage product quality through rapid, precise analysis of carbohydrates, alcohols, amino acids, and electrolytes.

Medical Research and Sports Physiology



From diabetes and cancer research to stem cell therapy and sports physiology applications, YSI's gold standard biosensor technology is recognized as the scientist's analytical technology of choice.

Typical Results

Application	Sample Preparation	Typical Results	Analysis Time
Bioreactor glucose	None	CV < 2% at cal pt.	< 1 min.
Lactate/ethanol in ketchup	Diluted 1:1 with reagent water	Lactate CV = 1.8% at 72.5 ppm Ethanol CV = 2.1% at 181.2 ppm	< 1 min.
Whole blood/ serum glucose	None	Whole blood CV < 2% at 75 mg/dL NIST Serum Controls 965A CV 0.5% – 1.1% for 34-292 mg/dL	< 1 min.

Technical Specifications

Chemistries

	Bioprocess Monitoring	Food and Beverage	Medical Research
Glucose	✓	✓	✓
Lactate	✓	✓	✓
Glutamine	✓	✓	✓
Glutamate	✓	✓	✓
Ammonium	✓	✓	
Potassium	✓	✓	
Xylose	✓		✓
Ethanol	✓	✓	✓
Methanol	✓		✓
Sucrose	✓	✓	✓
Galactose	✓		✓
Lactose		✓	✓
Choline		✓	✓
Glycerol	✓	✓	✓
Hydrogen peroxide	✓	✓	✓

✓ Primary application

✓ Secondary application

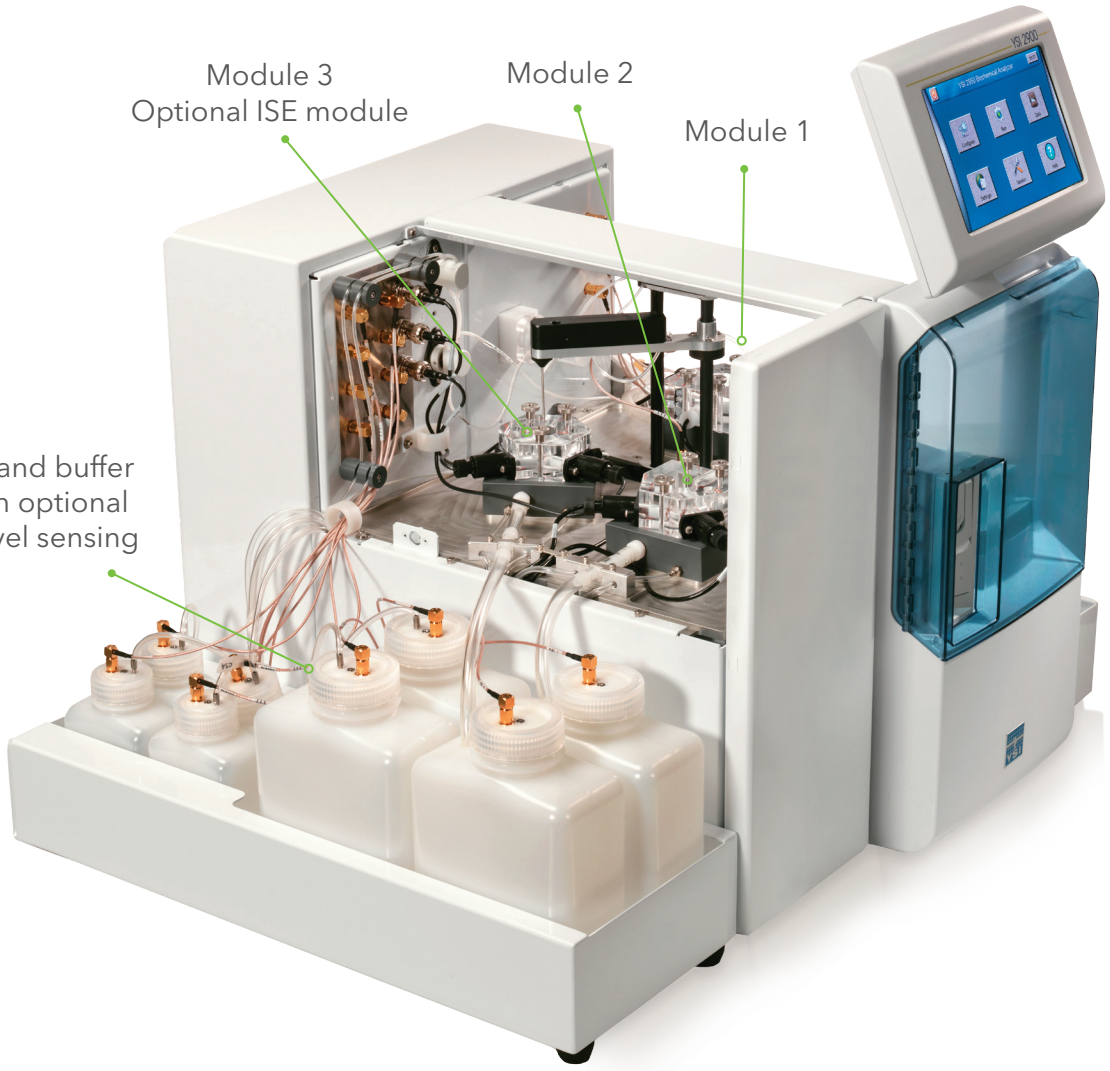
Specifications

Aspirated Sample Volume	User-defined from 10 to 50 µl
Analysis Time	60 seconds
Precision	Application specific, typical CV <2%
Linearity	+/- 5% Cal value to maximum
Dimensions	YSI 2900: 8"w x 20.5"d x 15.75"h 20.3cm w x 52.1cm d x 40cm h YSI 2950: 14”w x 20.5”d x 15.75”h 35.6cm w x 52.1cm d x 40cm h Bottle rack adds 9” (22.9cm)
Working Environment	15 to 35° C ambient temperature, 10 to 75% relative humidity (noncondensing)
Power Requirements	100-120 VAC or 220-240 VAC, 50-60 Hz, 50 Watts nominal
Regulatory Compliance	CE, RoHS
Automation	Up to 96 samples
Weight	YSI 2900: 28 lbs./12.7 kg YSI 2950: 39 lbs./17.7 kg Each without bottle rack

Modularity

2900 to 2950

The YSI 2900 Series is a flexible, modular platform with a range of configurations, options, and accessories to meet your lab needs. The base platform is the YSI 2900D. Also available is the YSI 2950 platform, configurable with up to 3 sensor modules capable of measuring up to 6 chemistries. Module 3 may be configured for biosensor or ISE measurements.



Printer Option

If you need a hard copy or printout of your results, an optional thermal printer is available. Of course, your data can also be retrieved electronically.

Tube Holders

The 2900 Series can accept a wide range of sample holders including any standard 96 well, 4, 8 and 24 place test tube holders and microcentrifuge tubes.

Plate Sealers

Evaporation of volatile analytes like methanol or ethanol is not a worry – the sipper needle is capable of piercing and sampling from a range of films available to seal 96 well plates.

Configurations & Accessories

Instrument	Modules	Chemistries	Field Upgrade?
2900 D	●	2	No*
2950 D-0	●	2	Yes
2950 D-1	●●	4	Yes
2950 D-2	●●●	6	Yes
2950 D-3	●●●	6	Yes
2950 D-4	●●	4	Yes

*2900D to 2950 platform upgraded at an authorized service center

● Biosensor Module
● ISE Module

Features & Benefits

Features	Benefits
Icon-driven user interface with touchscreen	Easy to learn
Data download options	Save data on a memory stick, send it over the network, or access it in a database anytime
Onboard training videos	Minimizes operator learning curve
Multiple sample processing options	Simultaneous high-throughput analysis, stat sampling and online monitoring
Proprietary Enzyme Electrode	Fast, accurate, and analyte-specific results
Short, wide aspiration path with proprietary chamber measurement system	Highly resistant to clogging, handles the highest cell counts without pretreatment
Uses biological separation technology	No hazardous chromatography solvents to dispose of
Slim modular design	Easily expand analytes or chemistries, and multiple units use much less bench space
Connect with OPC, ethernet, USB, RS232 to computer or other instruments and systems	Ease and flexibility of connectivity
Results automatically saved in searchable database	Multiple convenient methods for data retrieval
21 CFR, Part 11 Compliant	Assures electronic records and signatures integrity for cGMP applications

About YSI

Founded in 1948, YSI develops and manufactures scientific instruments, sensors and systems that serve a variety of scientific and industrial markets worldwide. YSI has a long history in the life sciences and bioanalytical markets, most notably with our introduction of the world's first commercial whole blood glucose analyzer in 1975. Today there are over 10,000 YSI instruments installed around the world, trusted in critical situations to provide the most accurate data in the shortest time.

About Xylem |'zīl əm|

1) The tissue in plants that brings water upward from the roots;
2) a leading global water technology company.

We're a global team unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to xyleminc.com.

xylem
Let's Solve Water

a xylem brand

YSI Life Sciences
1725 Brannum Lane
Yellow Springs, OH 45387
USA
+1 800.659.8895
+1 937.767.7241
Fax: +1 937.767.8058
Email: support@ysi.com
ysi.com/lifesciences

B51 713