Typical Applications

- STAT laboratory Diabetes research
- Blood glucose monitor quality assurance
- Blood glucose monitor calibration
- Healthcare patient diagnostics
- Metabolic research Sports physiology

Stat Glucose, Lactate & Whole Blood Analyzer YSI 2300 STAT Plus[™]

YSI 2300 STAT Plus systems & accessories



Easy sampling: Present a sample to the sipper tube and press the keypad. The 2300 automatically aspirates the sample and, in less than 60 seconds, displays and prints glucose and lactate levels.

Typical Cost Per Test for YSI Biosensor-Based Measurements*



The measurement standard for fast, accurate glucose & lactate results.

In 1975, YSI commercialized the first analyzer to measure glucose in whole blood. YSI followed this in 1982 with a whole blood lactate analyzer. Since then, these products have become the gold standard for clinical diagnostic work in hospitals and laboratories. The YSI 2300 STAT Plus was the first glucose and lactate analyzer available. In 60 seconds or less, this analyzer makes precise glucose measurements of whole blood, plasma, or serum and precise lactate measurements of whole blood, plasma, or cerebrospinal fluid.

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IQ/OQ documentation is available for the 2300 system. Ordering this flexible package along with the instrument will help you save time and money as well as meet current Good Manufacturing Practices.

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Standard Features

In addition to speed, autocalibration, and small sample size, the YSI 2300 STAT PLUS features:

- Lower cost per test. No need to renew enzymes after each test, minimizing the use of costly reagents and supplies.
- Whole blood capability. The only dual channel glucose and Glucos lactate analyzer that analyzes whole blood---no need to spin I-lact blood.
- Simple, safe operation. Menu-driven software guides operators through each step.

- Batch runs. 24-position turntable provides batch operation capability for plasma or serum. Each batch and sample is assigned an identification number with date and time.
- Interference rejection. Eliminates most of the interferences that plague other methods.
- Broad measurement range. Eliminates the need for sample dilution.

Labs serving surgery, intensive care, neonatal, and other critical care areas find the 2300 STAT Plus a valuable tool. Lactate analysis may signal an oxygen deficit in a critically ill patient. Glucose analysis may reveal hypoglycemia, hyperalycemia, or even chronic illnesses such as diabetes. The 2300 STAT Plus provides results in seconds, enabling better diagnosis in medical treatment.

Reagent Ordering Info

Chemistry	Membrane	System Buffer	Calibration Standard	Linearity Check Solution	Starter Kit
Glucose	2365 (4-pack)	2357 (dry mix) makes 4 liters	2356	1531 (125 ml) 9.00 g/L or 50.0 mmole/L	2324
L-Lactate	2329 (4-pack)	2357 (dry mix) makes 4 liters	2328	1530 (125 ml) 2.70 g/L or 30.0 mmole/L	2325
Glucose/ Lactate	2365/2329 (4-pack)	2357 (dry mix) makes 4 liters	2747	1530/1531	2323

Options & Accessories

Item Part N	Number
STAT Plus Glucose and Lactate Analyzer	2300D
Preservative Kit	2315
Cell Lysing (8 packets/4 liters)	1515
Membrane Installation Solution	2392
Membrane Check Solution	2363
Printer Paper 5-pack	2751
Preventive Maintenance Kit	2788

YSI and the Blood Glucose Monitor

When YSI marketed the first commercially successful whole blood glucose analyzer in 1975, few people realized that this enzyme electrode technology would become the world's gold standard for whole blood glucose measurement. The accuracy, precision, and speed for a whole blood glucose measurement were unmatched in the analytical market. Though the home glucose monitor (glucometer) was in its infancy in the 1970s, these devices rapidly improved over the years.

When healthcare companies that developed and manufactured the glucometers initially searched for the standard by which to factory calibrate both meters and test strips, YSI became the instrument of choice. Today millions of diabetics around the world depend on the accuracy of home glucose monitors. That accuracy is most often traceable to YSI glucose measurements systems such as the 2300 STAT Plus. Similarly, hospital versions of these early glucose monitors are now the preferred method of "point of care testing," both in the critical care satellite labs and in bedside testing of patients in diabetic wards. Again, YSI provides the method by which to ensure the accuracy of these devices.



2300 STAT Plus Glucose and Lactate Analyzer

Analyzer	
Sample Size	25 μL, (aspirated volume)
Response Time	(from test tube holder)
Normal Mode:	Displayed and printed result in 65 seconds. Sample to sample interval is 100 seconds.
Screen Mode:	Displayed and printed result in 45 seconds. Sample to sample interval is 70 seconds.
Operating Temperature	15 to 35° C
Humidity	10 to 90% noncondensing
Power	110-120 VAC or 220-240 VAC, 50-60 Hz, 50 Watts nominal
Size	25.4 x 35.6 x 35.6 cm, 11.4 kg; 10 x 14 x 14 inches, 25 lbs
Regulatory Compliance	CSA, CE, FDA Registered Class II (862.1345)
CE Device Category	IVD

Analytical Performance

Parameter	Measurement Range	Calibration Point	Precision	Typical Membrane
				Working Life
Glucose	Normal Mode: to 900 mg/dL (9000 mg/L, 50.0 mmol/L) Screen Mode: to 500 mg/dL (5000 mg/L, 27.8 mmol/L)	180 mg/dL (1800 mg/L, 10.0 mmol/L)	Whichever is larger, ±2% of reading or 2.5 mg/dL (25 mg/L or 0.2 mmol/L)	21 days
L-Lactate	Normal Mode: to 30.0 mmol/L (267 mg/dL, 2670 mg/L) Screen Mode: to 15.0 mmol/L (134 mg/dL, 1335 mg/L)	5.00 mmol/L (45 mg/dL, 445 mg/L)	Whichever is larger, ±2% of reading or 0.1 mmol/L (1 mg/dL or 10 mg/L)	14 days

Note: YSI makes no performance claims for sampling whole blood using the YSI 2710 Turntable.

8500 BioVision Dissolved CO₂ Monitor

Monitor

Monnor		
Measurement	pCO ₂	
Response Time	$T_{90} < 7 min.$	
Range	1-25% at atmospheric pressure (760 mm Hg)	
Accuracy	±5% of reading or 0.2% absolute (whichever is greater)	
Calibration	Single point; performed with reference gas before start of process	
Drift	2% of actual reading per 7 days	
Operating Temperature	20 to 40°C	
Operating Pressure	2 bar/30 psig maximum	
Sterilization Temperature	132°C, 20 minutes	
Sterilization Pressure	2 bar/30 psig maximum	
Sensor Technology	Opto-chemical	
Sensor Working Life	45 days continuous use	
Fluorescent Dye	Hydroxypyrene trisulfonic acid	
Data Paths	RS-232 or RS-485,	
	4-20 mA loop or 1-5 Vdc	
Regulatory Compliance	UL, CUL, CE	