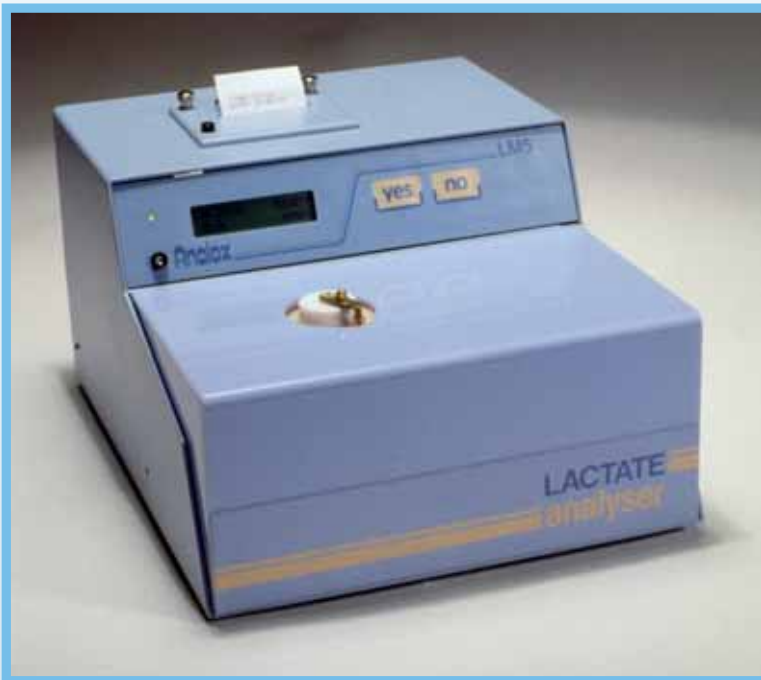
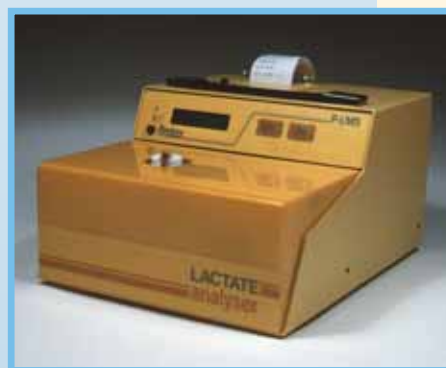


ANALOX LM5

the Fast Lactate Analyzer



- **Result in 20 seconds**
- **5µl micro-sample**
- **Simple YES/NO operation**
- **Whole Blood, Plasma or Serum samples**
- **Word display for user guidance and self-test functions**
- **Integral printer**
- **Fully sterilizable pathways**
- **Compact system (only 3.8Kg)**
- **RS232 interface + software option**

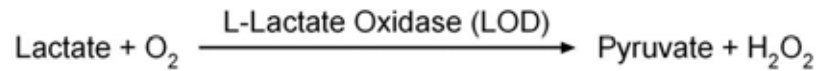


Fully portable battery/mains model also available

A compact, simple-to-operate analyzer for the rapid determination of lactate in clinical research, metabolic studies, critical care and sports medicine.

Analytical Principle

The LM5 Lactate Analyzer measures the rate of oxygen uptake in the reaction between sample lactate and lactate oxidase (LOD). Under the assay conditions, this is directly proportional to the L-lactate concentration.



Analyzer Operation

After calibration with an appropriate lactate standard, the simple injection of a microlitre sample is all that is needed to obtain a result and prepare the analyzer for the next analysis. Sample injection via an accurate positive displacement pipette triggers the complete analytical cycle and the hard-copy result is printed within 20 seconds

The analytical procedure is menu-driven via the 32-character display which guides the operator through all steps. Subsidiary menus are reached via the YES and NO buttons which enables the user to optimize operational modes, utilize special functions and perform statistical analysis. The display also provides self-test diagnostics in relation to electrode status and reagent enzyme activity.

Samples

Whole blood, plasma, serum or other biological fluids may be used and turbidity is no problem.

Very small whole blood samples, especially in pediatrics, are collected in Analox capillaries (30-50µl fill volume) which can be used with special cards for sample storage and identification. Collection tubes with fill volumes of 0.2ml or 0.5ml are applicable for venous/arterial samples. Whole blood can be analyzed as intact or lysed specimens.

Analytical Performance (Clinical)

Accuracy - Method Comparison	Plasma, vs Boehringer UV n = 20, r = 0.997 y = 0.967x + 0.003mmol/L	Whole blood (non-lyzed), vs YSI 23L n = 56, r = 0.998, y = 1.017x - 0.087mmol/L Whole blood (lyzed), vs Sigma UV n = 24, r = 0.996, y = 0.992x - 0.049mmol/L
Accuracy - Recovery Data	Plasma, mean 99.25% (96-104%) range 2.5 - 10.0mmol/L	Whole blood, 97% (88-104%) range 3.5 - 11.0mmol/L
Precision	Plasma, n = 30 CV = 0.6% at 10.0mmol/L	Whole blood, n = 22 CV = 1.6% at 5.0mmol/L
Linearity	0 - 10mmol/L for 5µl sample 0 - 20mmol/L for 2.5µl sample	
Sensitivity (analyzer)	0.1mg/dl; 0.1mmol/L (0.01mmol/L, optional)	

Instrument Specifications

Method	Enzymatic oxygen-rate
Sensor	Clark-type amperometric oxygen electrode
Reaction Temperature	30°C
Display	32 character backlit LCD
Printer	16 column dot matrix, 1 line/sec
Interface	Serial data port, optional Windows software available
Power	100-250V AC, 50-60Hz, 12-15V DC, 60VA
Dimensions	23cm (width) x 29cm (depth) x 15cm (height)
Weight	3.8Kg (Portable P-LM5 6Kg)

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