

# GL6

# Fast Multi-Assay Analyser

an Industrial Analyser with 5 Unique Assays

The GL6 can be specified to include five of the following single point calibration assays according to your areas of interest: **Ethanol, Glucose, Glycerol, Lactate, Methanol, Sucrose or Lactose**

## APPLICATION AREAS

- Fermentation Monitoring
- Industrial Process Control
- Food and Beverages
- Pharmaceuticals
- Biotechnology
- Offshore methane fuel extraction

## MAIN FEATURES

- Offline flexibility
- No sample turbidity or opacity errors
- Aqueous samples
- Sample size from 2.5 - 10  $\mu$ l
- Simple YES/NO operation
- Fully sterilizable fluid pathways
- Printed results in under 20 seconds
- Data output facility
- Compact size
- Fully portable version available



## PRINCIPLE OF OPERATION

### For example:

**Ethanol:** In the presence of molecular oxygen, ethanol is oxidised by the enzyme alcohol oxidase (AOD) to acetaldehyde and hydrogen peroxide,



Under the conditions of the assay, the rate of oxygen consumption is directly proportional to ethanol concentration.

**Glucose:** In the presence of molecular oxygen,  $\beta$ -D-glucose is oxidised by the enzyme glucose oxidase (GOD) to gluconic acid and hydrogen peroxide,



Under the conditions of the assay, the rate of oxygen consumption is directly proportional to glucose concentration.

**Lactate:** In the presence of molecular oxygen, lactate is oxidised by the enzyme Lactate Oxidase (LOD) to pyruvate and hydrogen peroxide,



Under the conditions of the assay, the rate of oxygen consumption is directly proportional to the L-lactate concentration.

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## ANALYTICAL PERFORMANCE

### Working Range

<b>Ethanol</b>	>	0.1 - 10%V/V
<b>Glucose</b>	>	0.05 - 20%W/V
<b>Lactate</b>	>	0.06 - 14 mmol/L (ca. 0.5 - 126 mg/dl)

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## INSTRUMENT SPECIFICATIONS

Method	>	Enzymatic oxygen-rate	Statistical Programmes	>	Sequential, giving mean, S.D and C.V.
Sensor	>	Clark-type amperometric oxygen electrode	Interface	>	Serial data port, optional Windows software available
Sensitivity	>	0.1, 0.01, 0.001 selectable	Power	>	100-250V AC, 50-60 Hz, 12-15V DC, 60 VA
Reaction Temperature	>	30°C	Dimensions	>	Width 23cm, (9 ins) x Depth 29cm, (11¼ ins) x Height 15cm, 6¼ ins
Display	>	32 character backlit LCD	Weight	>	3.8 kg, 8 lb 6 oz Portable Model 5.9 kg, 13 lb

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