**SERVOMEX 5200 MULTI PURPOSE**

PORTABLE BENCHTOP GAS ANALYSER

For analysing the composition of common gas mixtures in laboratories and light industrial applications

- Non-depleting paramagnetic and infra-red measurement technology ensures the unit is always ready for use
- Accurate, reliable and component specific, giving confidence that observed values are credible and not due to background interference
- Customer pre-tested software offers ease of use, simple calibration and advanced features
- Innovative construction gives a robust unit with a space saving footprint
- Rechargeable battery and vehicle power (12/24V) options enable mobile use

**SPECIFICATION**

**GASES MEASURED**  
O₂ and/or CO₂ (CO₂ to follow)

**MEASUREMENT PERFORMANCE**

<table>
<thead>
<tr>
<th>Technology</th>
<th>OXYGEN</th>
<th>CARBON DIOXIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variant:</td>
<td>Standard accuracy</td>
<td>High accuracy</td>
</tr>
<tr>
<td>Full scale range (FSR):</td>
<td>0-100% O₂</td>
<td>0-100% O₂</td>
</tr>
<tr>
<td>Accuracy, general use:</td>
<td>±0.2% O₂</td>
<td>±0.05% O₂</td>
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<tr>
<td>Accuracy, stable environment:</td>
<td>±0.1% O₂</td>
<td>±0.02% O₂</td>
</tr>
<tr>
<td>Zero drift, per week:</td>
<td>±0.4% O₂</td>
<td>±0.2% O₂</td>
</tr>
<tr>
<td>Response time (T₉₀):</td>
<td>&lt;10 seconds</td>
<td>&lt;15 seconds</td>
</tr>
<tr>
<td>Tilt effect, at 15° from cal:</td>
<td>±0.3% O₂</td>
<td>±0.15% O₂</td>
</tr>
<tr>
<td>Pressure effect:</td>
<td>Directly proportional to ambient barometric pressure</td>
<td></td>
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</tbody>
</table>

**PHYSICAL**

- Operating temperature: -10°C to +50°C (+14°F to +122°F)  
- Temp. coefficient, zero: ±0.2% O₂ per 10°C (18°F)  
- Temp. coefficient, span: ±0.3% O₂ per 10°C (18°F)  
- Dimensions: W 150mm (6.0") x D 260mm (10.5") x H 300mm (12.0")  
- Weight: 2.6kgs (5.7lbs) to 3.9kgs (8.6lbs) depending on configuration

**SAMPLE**

- Sample gas: Clean, dry, non-flammable and non-toxic gases only  
- Flow variation effect: ±0.1% O₂ for a ±0.5% psig (3.5kPa) change  
- Flow control: To maximise measurement stability, unpumped units are supplied with an automatic flow control device (AFCD). Over the specified inlet pressure range this controls sample flow rate to approximately 1.5 to 6 litres (0.05 to 0.2 cubic feet) per minute  
- Inlet pressure: Without pump 7kPa (1psig) to 70kPa (10psig)  
- With optional internal pump -7kPa (-1psig) to 3.5kPa (0.5psig)  
- Sample inlet connection: 5mm OD stub with “Quickconnect” barb fitting for 6.3mm (¼") ID tube or adaptor to ½” NPT fitting option  
- Sample outlet connection: 5mm OD stub (sample and bypass)  
- Sample filter: Replaceable 0.6µm glass fibre particulate filter

**Response time** - All at 10psig (70kPa)
**Flow effect** - AFCD version, within specified sample gas supply range
SERVOMEX 5200 MULTI PURPOSE

The Servomex 5200 Multi Purpose gas analyser has been specifically designed to meet the demanding needs of field and laboratory analysts, light industrial users and others who require fast, accurate and reliable analysis of common gas mixtures. This compact, portable and easy to use instrument is based upon a non-depleting, component specific measurement technique (magnetodynamic paramagnetic and infra-red) for long life and minimal running costs, avoiding the problems associated with electrochemical or other less robust methods of analysis.

The 5200 Multi Purpose replaces the well established Servomex 244, 404, 571, 572 and 575 analysers. Where there is no risk of an explosive atmosphere it may also be used to replace the Model 570.

APPLICATION EXAMPLES:

- Physiology studies
- Universities
- Laboratory reactors
- Fermentation
- Medical gas verification

APPROVALS:

ORSAT validated to meet USFDA performance requirements for verifying medical oxygen USP and nitrogen NF.
CE marked and in compliance with the EEC EMC and WEEE Directives.
UL, TÜV, FCC and PSE approved 100-240V AC power supply.

OPTIONS

- Internal pump: 0.8l (0.03 cu.ft)/min internal pump with user configurable timer
- Analogue output: One 4-20mA output per measurement. (Note RS 232 output included as standard on base model)
- Rechargeable batteries: Advanced lithium ion batteries providing 8-36 hours use, depending on sensor selections
- Vehicle power adaptor: Allows the unit to run/recharge from 12/24V DC vehicle socket
- Printer: Preformatted compact, mains power/rechargeable printer
- Additional barb fittings: Additional QuickConnect fittings to simplify connection of zero and span gases
- ¼” NPT adaptor: QuickConnect fitting to allow connection to hard pipes
- 2 years spares: Recommended spares for two years operation, comprising replacement filters (5) and filter cap ‘O’ ring

ADDITIONAL ACCESSORIES AVAILABLE (consult your local sales contact):

- Flue Gas Conditioning Panel
- Flow Meters
- Sampling Probes
- Transport Case

Visit www.servomex.com for technical data sheets, application and technology information for all Servomex analysers.

Servomex has a policy of constant product improvement and therefore reserves the right to change specifications without notice.