

Introduction to Maxtec and Life Spark Oxygen Monitoring

What is oxygen monitoring?

Oxygen monitoring is used for the physical measurement of gases for fractional oxygen (FiO₂) outside of the body before it enters the patient i.e.

- Piped or Bottled Gases
- Oxygen Concentrators
- Ventilators
- Air/Oxygen Blenders
- Oxygen Hoods (product dependent)

Measurements are typically between 21 and 100%.

Medical Maxtec Analysers and Monitors

MaxO₂+A Oxygen Analyser

This analyser, with internal sensor, quickly adapts for use in tubing applications and is ideal for checking oxygen percent accuracy in line or on concentrators. The MaxO₂+A and AE will calibrate to room air (20.9%) or 100% oxygen. For applications needing an external sensor, see the MaxO₂+AE below.

The MaxO₂+A includes the following accessories:

- 1 x 0110427 MAX-250+ oxygen sensor
- 1 x 0120100 T adapter*
- 1 x 0120095 Flow diverter
- 1 x 0120120 Oxygen concentrator adaptor cap



Benefits

- Long battery life (approximately 5,000 hours on 2 x AA batteries)
- Ergonomically designed hand-held unit
- Impact resistant and drip proof
- Large LCD with 3.5 digit display
- Warranty: 24 months

Part Number: 0111260

Other variants available, SCUBA.

*When supplied as an accessory with the monitor this is covered by the CE mark of the monitor.

** Two versions of the MAX-550E are available, one is for use with the MaxO₂ ME monitor, the other is for the MaxBlend. The difference is the design and size of flow diverter supplied with each.

MaxO2+AE Oxygen Analysers

The MaxO2+AE is best used wherever an inline analyser is required—especially useful with older ventilators or oscillators.

The MaxO2+AE includes the following accessories:

- 1 x 0110429 MAX-250E oxygen sensor
- 1 x 0120100 T adapter*
- 1 x 0120095 Flow diverter
- 1 x 0121302 V mount assembly



Benefits

- Long battery life (approximately 5,000 hours on 2 x AA batteries)
- Ergonomically designed hand-held unit
- Impact resistant and drip proof
- Large LCD with 3.5 digit display
- Warranty: 24 months

Part Number (Standard): 0111261

Part Number (Short Cable): 0111262

Other variants available, SCUBA.

Handi+

The Handi+ oxygen analyser is great for spot-checking oxygen percentages in hospitals, clinics, and home care environments.

Benefits

- One-touch calibration
- Over mould for extra protection
- Small, convenient and portable
- Auto-off
- **Disposable at end of sensor life**
- 3 digit LCD display
- Warranty: 24 months



Other variants available including, for use in Industrial, Automotive (Nitrogen) and SCUBA applications.

Please be aware, this has an integrated sensor and therefore, once depleted, has to be disposed of. The sensor has a long life of 1,500,000 oxygen percent hours and the battery will last for 1,850 hours.

The Handi+ includes the following accessories:

- 1 x 0120100 T adapter*
- 1 x 0120095 Flow Diverter
- 1 x 0120120 Oxygen Concentrator Adaptor Cap

Unlike the Envitec OxiQuant S, this unit is CE certified for medical use.

Part Number: 0111250

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MaxO2 ME Oxygen Monitor

The MaxO2 ME low-maintenance oxygen monitor with smart alarms auto-set at 3% $\pm$ current reading. Oxygen monitor with adjustable alarms from 15 – 99%.

The MaxO2 ME includes the following accessories:

- 1 x 0110452 MAX-550E oxygen sensor**
- 1 x 0131700 Sensor cable
- 1 x 0120100 T adapter*
- 1 x 0120095 Flow diverter



Benefits

- Long battery life (approximately 5,000 hours on 2 x AA batteries)
- Adjustable alarms from 15 - 99%
- Smart alarms - Sets alarms 3% $\pm$ current reading
- Backlit LCD display
- DC power port (power supply sold separately)
- Protective overmould
- Built-in kickstand and dove tail
- Warranty: 24 months

Part Number: 0111263

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Ultrasonic Oxygen Analysers

Both of the following analysers are intended for equipment testing during oxygen concentrator service and repair. They **must not** be used to monitor or confirm oxygen delivery to a patient.

Maxtec UltraMaxO2

The UltraMaxO2 offers a fast and easy verification of oxygen concentration, flow and outlet pressure of oxygen concentrators.

The UltraMaxO2 helps oxygen concentrator service technicians looking to save on costs and time when checking patient oxygen concentrators. With integrated oxygen, flow, and outlet pressure monitoring in a single device, this handheld device is easy to operate, store, and transport and does not require a traditional electrochemical sensor, which reduces the overall maintenance and minimizes the cost of ownership.

The UltraMaxO2 is calibrated to measure oxygen, nitrogen and argon in the oxygen-enriched gas produced by an oxygen concentrator, and pure oxygen during calibration-verification mode.



Benefits

- Accurately measure oxygen, flow & pressure
- No oxygen sensor required
- No in-field calibration
- Self-diagnostics
- Shielded, reinforced sample gas inlet port
- Measurement range: 20.9 - 96%
- Warranty: 36 months

No annual calibration or service required but is available upon request.

Part Number: 0111265

Life Spark Smart Check

The Smart Check offers fast and easy verification of oxygen concentration, flow and outlet pressure from oxygen concentrators.

Designed for oxygen concentrator service and repair, the Smart Check combines oxygen, flow and pressure measurement within one handheld unit. It can test both continuous-flow and pulse-dose oxygen concentrators, measuring flow rate in continuous mode and delivered pulse volume in pulse mode.

A dedicated low-pressure range also allows pressure testing of equipment such as CPAP, BiPAP and nebulisers. The backlit display, built-in torch and integrated tube management make the Smart Check particularly convenient for service engineers working in different environments.

The Smart Check uses ultrasonic measurement technology and does not require a replaceable electrochemical oxygen sensor or routine in-field calibration. A calibration check can be performed using pure oxygen to verify the analyser's performance.



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Benefits

- Accurately measures oxygen concentration, flow and pressure
- Tests continuous-flow and pulse-dose oxygen concentrators
- Measures delivered pulse volume from 3–200 ml
- Low-pressure mode for CPAP machines, BiPAP ventilators and nebuliser testing
- No replaceable oxygen sensor required
- No in-field calibration required
- Easy calibration check using pure oxygen
- Backlit display and built-in torch
- Integrated tube management
- Measurement range: 20.9–96% for oxygen concentrators
- Warranty: 36 months

No annual calibration or service required but is available upon request.

Part Number: 0111266

 		
Feature	Smart Check	UltraMaxO2
Oxygen Concentration, Flow Rate - Continuous Mode	✓	✓
Oxygen Concentration, Flow Volume - Pulse Mode	✓	✗
Low Pressure Mode	✓	✗
CPAP / BiPAP / Nebuliser Testing	✓	✗
Built-in Torch	✓	✗
Screen Backlight	✓	✗
Integrated Tube Management	✓	✗
Easy Calibration Check	✓	✓
Medical CE Class I	✗	✓
Industrial CE Class	✓	✗
Ultrasonic Sensor	✓	✓

Product selection: UltraMaxO2 is the straightforward choice for continuous-flow oxygen concentrator testing. Smart Check is better suited to customers who also service pulse-dose concentrators or require low-pressure testing.

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Maxtec Nitrogen Analysers

Nitrogen tire inflation will allow tires to perform better, last longer and provide superior fuel economy all while maintaining a more constant pressure than regular air-filled tyres.

The oxygen diffuses through the membrane and an electrical current is generated that is proportional to the partial pressure of oxygen in the gas sample. The oxygen percentage is subtracted from 100, with the remainder being displayed as percent nitrogen. The sensor has a minimal response to gases other than oxygen.

Handi+N2

Similar to the Medical version, the Handi+N2 is maintenance and disposable at the end of the sensor life. The Handi+N2 is great for spot-checking Nitrogen percentage in industrial and automotive applications.

Part Number: 0111248

MaxN2+A Nitrogen Analyser

Similar to the Medical version, the MaxN2+A has an internal sensor.

Part Number: 0111273

MaxN2+AE Nitrogen Analyser

Similar to the Medical version, the MaxN2+AE has an external sensor.

Part Number: 0111274

Cross Reference

When searching for replacement oxygen sensors for applicable monitors and analysers, go to the cross reference which can be found in Intrastats, drop down menu, cross references, select group "oxygen sensors".

Website: www.viamed.co.uk/xref

There are currently no lead-free alternatives for the Maxtec range of Oxygen Sensors.

Pricing

Pricing can be found on Intrastats, under the "£" symbol. There are also downloadable PDFs against the "£" or in the "i" section.

Marketing Materials

Up to date copies of marketing materials such as leaflets, manuals and price lists (or in the £ screen) can be found on the stock pages under the "i" icon.

Certifications

Should you require to find information on what certifications a product has please see the stock screen, "i" icon and find the "Certificates" option. Click this and it will open the document index and all related certificates for that line.

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