

AtmoCheck® OPTIC O₂

Optical Oxygen Analyser for random sampling of headspace



AtmoCheck® OPTIC O₂ is a laboratory analyser for the random quality control of residual oxygen concentrations. Utilising a state of the art optical oxygen sensor, our instrument provides reliable, fast and highly accurate results.

The AtmoCheck® analyser works without a pump, and can therefore be used to accurately measure O₂ in extremely small headspace volumes. Examples of where this machine excels are: modified atmosphere packaging (MAP) with a minute headspace, or very small blister packs for pharmaceuticals.

AtmoCheck® analysers are in a class of their own and are characterised by decades of experience, exceptional measurement performance, robust design and simple intuitive operation.

In order to ensure and achieve the highest possible product quality, just rapidly test the residual oxygen content to the highest accuracy with AtmoCheck® OPTIC O₂

Food Industry Applications



The use of gases in the food industry in order to increase product quality and extend the shelf life of food is well established and helps to achieve:

- ⇒ Quality Assurance
- ⇒ Attractive Appearance
- ⇒ Extended Shelf Life
- ⇒ Fewer Preservatives

With our AtmoCheck® OPTIC O₂ analyser you can easily ensure the consistent high quality of your products by regularly checking the inert gas atmosphere. Ideal for quality control of MAP packaging with an extremely small headspace volume.

- ⇒ MAP Packaging
- ⇒ Vacuum Packaging
- ⇒ Liquid Products
- ⇒ Coffee Packaging
- ⇒ Coffee Capsules, Coffee Pods
- ⇒ Milk Powder, Milk Powder Sachets

AtmoCheck® OPTIC O₂ is also optionally available for use directly on the packaging machine.

Pharmaceutical Industry Applications



Gases used in the production of active substances and pharmaceuticals are also used in a wide variety of areas and for various requirements, for example:

- ⇒ as high purity gases for the laboratory
- ⇒ as specialty gases for research and development
- ⇒ as process gases for manufacturing processes such as chemical synthesis
- ⇒ as inert gases for the removal of atmospheric oxygen
- ⇒ as gases for sterile processes
- ⇒ as traceable gases for GMP requirements
- ⇒ as gas mixtures for measurements in the laboratory or in environmental
- ⇒ as gases for the cultivation of organic crops

Many pharmaceutical products are very sensitive to atmospheric oxygen and moisture. Packaging in a protective atmosphere effectively prevents drugs from losing their effectiveness. The shelf life of therapeutic proteins in particular, which may be produced using nitrogen, is significantly extended.

AtmoCheck® OPTIC O₂ can optionally be used for the measurement of dissolved oxygen in a liquid.

All highlights at a glance

- ⇒ Application range for headspace volume < 2 ml
- ⇒ Measuring range < 0.05% - 100%
- ⇒ Short measuring time < 2 sec.
- ⇒ Intuitive operation via 10" colour touchscreen display
- ⇒ Integrated data logging software
- ⇒ Graphic display
- ⇒ Auto-Calibration Function
- ⇒ Product menu and product management
- ⇒ Ethernet connection for integration into networks
- ⇒ Easy hygienic care due to splash-proof design
- ⇒ Simple calibration in air via integrated SPAN procedure
- ⇒ Low maintenance and robust design
- ⇒ Also suitable for long-term testing

Special Features



AtmoCheck® OPTIC O₂ can be used in extreme conditions where traditional gas analysers cannot operate. The challenge of creating a sensor capable of measuring a miniscule headspace was to protect the sensor from food particles, powder or liquid. This was achieved with our new Optical Sensor Technology.

The outstanding feature of AtmoCheck® OPTIC O₂, is that the Sensor is the only item that ever requires cleaning, and this is simplicity itself, taking literally only a few seconds.

In order to remove all soiling caused by either dry or liquid product residues that may remain on the sensor, all you need is just a glass of water. Simply place the tip of the sensor into the water and stir it for a couple of seconds.

The sensor is then ready for use again within the shortest possible time.

The AtmoCheck® OPTIC O₂ is therefore virtually impervious to both solid and/or liquid contaminants.



AtmoCheck® OPTIC O₂ is intuitive, easy and safe to use. With a simple tap on the user interface you can control all functions; select products, create new products or users, etc.

Display of measured values, selected product, measuring time and limit values are clearly displayed on the large 10" touch display.

Technical data

Gas	O ₂ (residual oxygen) < 0.00 - 100%	Headspace volumes	< 2 ml
Measuring time	< 2 sek.	Interfaces	Ethernet, USB
Resolution	0,01% absolute *	Housing	Stainless steel
Accuracy	+/- 0,05% absolute **	Protection class	IP40
Service Life of O ₂ Sensor	< 18 month	Weight	Approx. 7 kg
Heating time	< 1 minute	Dimensions	(HxWxD) 160 x 370 x 270 mm
Measuring temperature range	From 0° to + 50°C	Power supply	110 - 240V 50-60Hz. 50W
Manufacturing Accreditations and Standards			
CE marked			

* Resolution: ± 0,01 % O₂ at 1 % O₂
± 0,05 % O₂ at 20,9 % O₂

** Accuracy at + 20 °C ± 0,05 % O₂ or ± 3 % rel.