

Focus on freshness  
guarantee – with  
gas analysers from WITT.  
Keyword: HACCP



**»GASES RIGHT?  
PACKAGE TIGHT?«**

MARTIN BENDER: MANAGING DIRECTOR – WITT-GASETECHNIK

# OXYBABY® 6.0

Cordless hand held gas analyser for mobile sample testing of O<sub>2</sub>, CO<sub>2</sub> or O<sub>2</sub> and CO<sub>2</sub>

## 1 Graphic display

- Results in 0.01 % steps
- Illuminated LCD display
- Displayed information:*
- Results O<sub>2</sub>/CO<sub>2</sub>
- Product name, user, line
- Date/time of last measurement
- Charging status
- Memory status
- Sample-hold or permanent measurement
- Pressure inside the package



## One-hand operation with data log

### > INCLUDED IN DELIVERY

#### Complete in carrying case with:

- Charging device
- 2 spare needles
- 2 spare filters
- Set of 100 patches
- Case dimensions (H x W x D): approx. 325 x 385 x 115 mm (12.79 x 15.16 x 4.53 inch)
- Case weight: approx. 1.7 kg (3.75 lbs) incl. contents

### > Options

- Table stand and hose for use as tabletop unit

only for OXYBABY® 6.0:

- OBCC software
- Barcode reader
- Bluetooth (e.g. for separate printer)
- Separate printer
- Data cable



OBCC software to evaluate your quality controls

## 2 Ergonomic design

## 3 Integrated pressure compensation

- Compensates for air pressure fluctuations

## 4 Automatic measuring after needle insertion

- Result in 6 seconds
- Sample flow control
- Needle cover to protect needle and user

## 5 Integrated micro gas pump

## 6 USB interface

- Data transfer
- Charging

## 7 Micro SD card

- Software upgrades

## 8 One-hand operation

Ready for operation immediately

- Calibration at the push of a button

## 9 Synthetic body

- Easy to clean
- Shock resistant

## 10 Integrated hydrophobic filter

- Protection against impurities and moisture



OXYBABY® 6.0 is a cost effective alternative to tabletop analysers for checking modified atmosphere packaging (MAP) – for example in line with a HACCP system. Due to its minimum sample gas requirements the OXYBABY® allows even the smallest of modified atmosphere packages to be tested.

The cordless, easily manageable analyser provides accurate and quick data. A special highlight to avoid wrong results: the permanent flow control with automatic alarm in the event of needle or filter blockage.

The high performance device allows the administration of up to 25 users and the classification of results for up to 100 product names and 50 packaging lines. Via the optional integrated barcode reader the user and product data can easily be read.

The OXYBABY® 6.0 is the perfect tool for fast and exact sample testing of O<sub>2</sub>/CO<sub>2</sub> directly at the packaging machine, in stores and in the laboratory. Wherever results have to be recorded this ergonomic analyser can be used. The optional Bluetooth interface offers all benefits of modern technology – wireless communication, fast and easy. For example to connect a printer.

With the practical table stand, your OXYBABY can be stowed away quickly and safely at any time using the magnetic connection. Supplemented with a hose, it can also be used as a tabletop unit.

The large data storage logs the last 500 results and allows long export intervals. In combination with the WITT software solution OBCC all results can be analysed and documented on a PC. The data transfer is realised via USB port.

With this full documentation you can guarantee highest packaging quality and optimal freshness to your customers.

Long-life sensors, simple component replacement and low maintenance costs make the OXYBABY both reliable and economical over the long term.

See our video on: [oxybaby.wittgas.com](http://oxybaby.wittgas.com)

#### › BENEFITS

- For the smallest of packs – minimum sample gas required (approx. 2 ml)
- Fast test – result in 6 seconds
- O<sub>2</sub> value is displayed in 0.01% steps
- Long lifetime of O<sub>2</sub> sensor
- No incorrect results – flow control with alarm
- Easy to use with one-hand operation and intuitive menu
- All information at a glance via the large, illuminated graphic display
- Cordless operation using rechargeable batteries
- No need to hand write results – full digital documentation
- Integrated data log of the last 500 measurements
- Hygienic, easy to clean synthetic body
- USB port
- Just one device for many applications – Administration of up to 25 users and management of results for up to 100 products and 50 packaging lines
- Multilingual menu guide (D, UK, F, I, NL, S, FIN, E, PL, RUS, H, TR)

#### › OPTIONS

- Evaluation and documentation of measurement results with WITT Software OBCC (see page 10)
- Table stand and hose for use as tabletop unit
- Wireless communication via Bluetooth (e. g. for connection of a separate printer)
- Barcode reader to import product and user data
- Version for pressurised sample gas with pressure controller
- Documented results with OBCC software
- Equipment for headspace analysis in cans/bottles (Can-Piercer)

## The OXYBABY® from WITT – your perfect companion for mobile sample testing of food packages

### OXYBABY® M+

The basic model as a cost-effective alternative



#### › BENEFITS

- Proven one-hand operation with rechargeable battery
- Measuring time 10 seconds
- O<sub>2</sub> value is displayed in 0.01% steps
- Long lifetime of O<sub>2</sub> sensor
- Intuitive keypad for easy handling
- Compact display
- Data log of 100 results

#### › OPTIONS

- Table stand and hose for use as tabletop unit
- Equipment for headspace analysis in cans/bottles (Can-Piercer)
- Version for pressurised sample gas with pressure controller

# MAPY 4.0

The multi-functional premium gas analyser for guaranteed quality and control



reddot design award

**1 Shapely, ergonomic design**

- „reddot design award“
- Inclined display

**2 Touch-screen**

- Intuitive data and parameter entry
- No skilled personnel needed
- 7" WVGA color display
- Resolution: 800 × 480 pixel

**3 Stainless steel housing**

- Easy to clean
- Splash proof

**4 Needle**

- Flow control with alarm
- Needle protector

**5 Handhold**

- For mobile use

**6 USB connection**

- Data transfer or software update via USB stick

**7 Ethernet interface**

- Integration into company network
- Comfortable data administration and analysis
- Customer oriented quality documentation

**8 Serial interface**

**9 Potential-free contact**

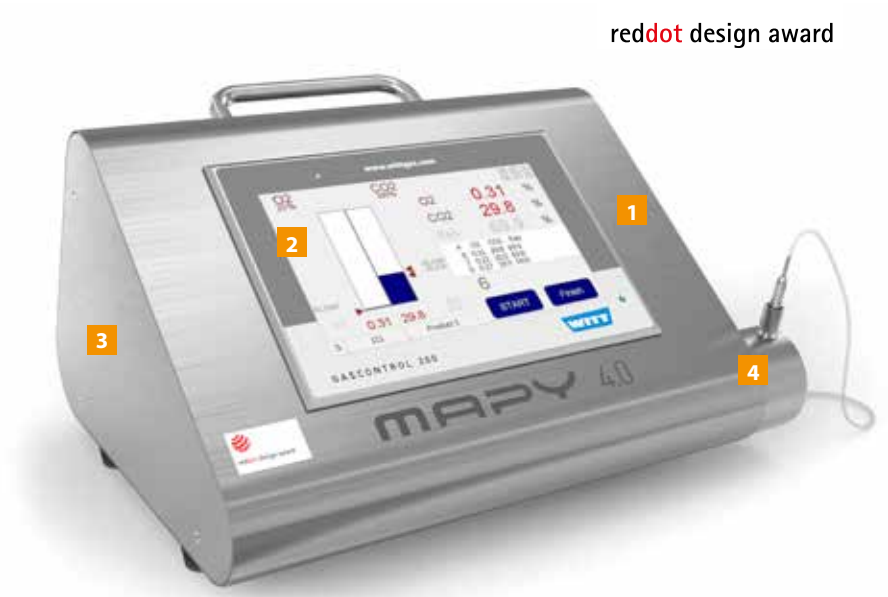
**10 Analogue output**

**11 Gas outlet**

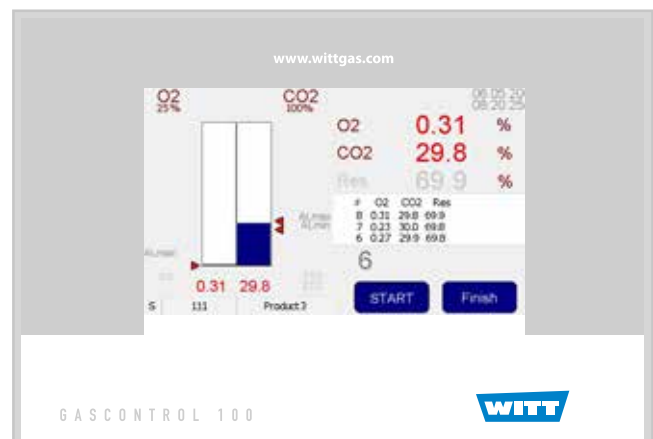
**12 Gas inlet**

**13 Sensor**

**14 Integrated audible alarm**



Multi-functional with touch-screen



The shapely, multi-functional analyser MAPY 4.0 is WITT's top model for checking of modified atmosphere packaging (MAP). The portable device sets standards in quality control regarding the combination of visual appearance, ergonomics and functionality and has won the "red dot award" for outstanding product design.

The new touch-screen as the central control element allows intuitive handling and provides optimal information. The MAPY 4.0 can be used for continuous analysis or intermittent sampling via a needle. Fast and reliable measurements and automatic alarm functionality if limits are exceeded assure quality and economy in production. Different types of sensors are available depending on the type of gas – CO<sub>2</sub>, O<sub>2</sub> or helium. The product portfolio contains chemical, paramagnetic, infrared or thermal measuring sensors. Also an extra long life zirconium measuring cell for precise O<sub>2</sub> results in ppm is available.

High-class components and the robust stainless steel design guarantee long service life and meet the high hygiene requirements in the food industry. Various interfaces (Ethernet, USB, barcode reader, printer) allow easy and flexible integration into existing systems. Exported data can be analysed and documented with the optional WITT software GASCONTROL CENTER.



MAPY 4.0 as 19" plug-in model for the use as a premium inline analyser

#### › **BENEFITS**

- For the smallest of packs – minimum sample gas required
- Short measuring time
- High accuracy down to ppm – different measuring methods depending on application
- Reliability – flow control with alarm function
- High process safety by permanent system check with alarm function
- Reliable steady measuring results by pressure compensation
- Data logging of thousands of results
- Administration of up to 60 users with individual rights and full documentation
- Management of results and individual limit values for up to 120 products
- Customer-oriented quality control – data transfer via Ethernet or USB stick
- Manual measuring or automatic measuring
- Simple calibration of sensor
- Maximum hygiene – Easy to clean stainless steel housing

#### › **OPTIONS**

- Different versions: sample testing, permanent control and for pressurised sample gas with pressure controller
- Also for additional gases
- Easy product selection with barcode reader
- As 19" rack version
- GASCONTROL CENTER software for data administration (for more information please see page 10)
- Also available as "lean edition" for the use as inline control

**MAPY 4.0 by WITT – the top model for gas analysis of food packages**



## PA 7.0

The compact gas analyser for fast measuring of O<sub>2</sub>, CO<sub>2</sub> or O<sub>2</sub> and O<sub>2</sub>/CO<sub>2</sub>



### 1 Graphical display

- Results in 0.1 % steps
- Illuminated LCD display
- Displayed information:*
- Results O<sub>2</sub> / CO<sub>2</sub>
- Product name
- Date/time of last measurement
- Charging status
- Memory status
- Sample-hold or permanent measurement

### 2 Easy cleaning

### 3 Stainless steel housing

### 4 Needle for sample testing

### 5 Easy, intuitive use

- No skilled personnel required

### 6 USB interface

- Data transfer
- Charging

### 7 Micro SD card

- Software upgrades

The PA 7.0 by WITT – the economic analyser series for laboratories, test centers and packaging lines

## Versatile and economic

The modified atmosphere in food packages needs regular monitoring during the packaging process to guarantee freshness of food.

For best quality and efficiency in production. The compact gas analyser PA enables the testing of O<sub>2</sub> / CO<sub>2</sub> for modified atmosphere packaging. Wherever results have to be recorded this comfortable analyser can be used. This can be done as intermittent sampling via a needle or as continuous in-line analysis. Depending on the type of gas and analysis the PA contains a chemical, a zirconia and / or an infrared measuring cell. The PA has an integrated data log for the last 500 results, which relate to specific product names. Results can be transferred to a PC for editing and analysing, e. g. with the WITT OBCC software.



Also available as plug-in model

### ➤ BENEFITS

- Compact design
- No skilled personnel required – intuitive use
- For the smallest of packs – minimum sample gas required
- Fast and precise results
- Versatile use – permanent monitoring or sample testing
- Logging of the last 500 results
- Individual limit values with relay contacts and alarm
- Maximum hygiene by easy-to-clean, robust and splash proof housing
- Interface for data exchange
- Multilingual menu guide (D, UK, F, I, NL, S, FIN, E, PL, RUS, H, TR)
- Different versions: sample testing, permanent control and for pressurised sample gas with pressure controller

### ➤ OPTIONS

- WITT OBCC software for data administration and analysis

# OXYBEAM

Laser gas analyser for O<sub>2</sub> or CO<sub>2</sub> for non-destructive sample testing of packages



- 1 Height-adjustable infrared laser head**  
laser class 1 – no safety glasses required
- 2 Non-slip surface** for packages between 5 and 80 mm (additional plate with magnetic fixing, available for very flat packaging)
- 3 Large color touchscreen** for displaying the measured values and changing the device settings
- 4 Insensitive stainless steel housing**  
Hygienic and easy to clean
- 5 USB port** for data transfer
- 6 Ethernet connection** for integration into the company network

**High-tech analysis for expensive products**

## OXYBEAM – non-destructive sample testing to avoid waste costs

The OXYBEAM gas analyser uses laser light and determines the O<sub>2</sub> or CO<sub>2</sub> content in transparent packaging without damaging it. The higher the product quality, the more important the quality control – and therefore the more expensive, if the packaging is destroyed and the product can no longer be sold. Using OXYBEAM reduces these costs to zero: the integrated laser beam determines the oxygen (or CO<sub>2</sub>) content inside the package without damaging. The sole requirement is to have a small viewing window into the interior of the packaging, which is the case with most shells, deep-drawn forms or tubular bags. The product is laid under the sensor and the measurements get started via the touch screen. The result is available after about only four seconds. The color touchscreen shows the measured residual oxygen (or CO<sub>2</sub>) content to an accuracy of 0.1 per cent absolute.

OXYBEAM measures precisely how much laser light is absorbed in the packaging and so determines the oxygen content. In contrast to other light-based systems, the Witt device requires no separate reflecting surface that has to be glued inside the package or printed on the inside of the film – a real cost benefit.

A further benefit: As the laser leaves the packaging undamaged and does not consume any protective gas during its use, repeated tests on a package as part of a long-term observation are possible.

OXYBEAM works with a class 1 infrared laser that does not require eye protection, due to its 760 nm wavelength. The product in the packaging as a whole does not even get warm as the laser power is less than 0.5 mW. The sensor measures the oxygen content over the full range from 0.1 to 100 % (CO<sub>2</sub>: 0 to 100%). The headspace of the packaging should be around 16 to 80 mm. All measurements by the device can naturally be stored and exported for evaluation and archiving. Calibration is performed once per year.



See our **demo video** on [wittgas.com](http://wittgas.com) or at the WITT Youtube channel

### › BENEFITS

- State-of-the-art laser technology for determining O<sub>2</sub> or CO<sub>2</sub> content
- Non-destructive testing of high-quality, MAP packed food avoids waste costs
- Repeated tests on a package as part of a long-term observation are possible
- Easy, intuitive operation via touchscreen; no trained personnel required
- Low maintenance and robust
- Low calibration effort
- No eye protection required
- USB port for data transfer
- Ethernet connection for integration into networks
- For measurements from 5 mm packaging height using an additional plate with magnetic fixing (optional)

# INLINE GAS ANALYSIS

WITT inline gas analysers guarantee high efficiency and safety. The inline gas analysis starts directly during the packaging process and offers a continuous checking of the supplied protective atmosphere. This quality assurance is the perfect complement to subsequent checking, increases process quality and allows the reduction of random checks. This reduces personnel costs and the amount of packaging waste. Depending on the packaging machine, even the gas consumption and thus the costs can be significantly reduced. The WITT product range includes suitable inline analysers both for form, fill and seal machines as well as for thermoforming machines and tray sealing machines.

## 1. Inline gas analysis for thermoforming machines

In thermoforming packaging machines or tray sealing machines, a vacuum is first generated in the packaging chamber, thus removing the air. In the next step, protective gas is supplied and then the tray is sealed. WITT also offers the MAPY VAC analyser, which is specially designed for these machine types.

In each cycle of the packaging process, a sample is taken when the protective gas is filled into the packaging and analysed within seconds. The testing process is fully automatic. An alarm is triggered when limit values are exceeded. The user can intervene directly and make changes to the process. The quality of the MAP packaging process is 100% assured and continuously optimised.

Owing to nature of the process, the amount of gas used in these packaging machines cannot be reduced. Nevertheless, inline gas analysis is very important for the most effective quality management. The sampling frequency and the associated personnel costs can be reduced, and the packaging quality increased at the same time. This is important for achieving the target best-before date and thus for securing your customer relationships in the long term.

## MAPY VAC

Inline gas analyser based on the MAPY 4.0, especially for thermoforming and tray sealing packaging machines



- **BENEFIT**
  - Fast and precise gas analysis before sealing
  - Measures every machine cycle
  - Available as a single or double analyser (O<sub>2</sub> or O<sub>2</sub>/CO<sub>2</sub>)
  - With touchscreen or as black box version (BB): MAPY VAC BB has no display and is specifically designed for automated machine control – control only possible via the packaging machine or a connected PC
  
- **OPTIONAL**
  - IP45 accessory kit for improved water protection



## 2. Inline gas analysis for flow packing machines

In flow packaging machines, protective gas is continuously fed into the film tube during packaging. The MAPY LE inline gas analyser is – in combination with a WITT KM-FLOW gas mixer – the key to maximum efficiency: with a lance, a sample is continuously taken from every single pack and quickly analysed. As long as the oxygen value is below the set limit value, the quantity of the supplied protective gas is reduced via the WITT gas mixer KM-FLOW. Only as much gas is used as is abso-

lutely necessary for an optimum packaging result. Completely automatically. Human intervention is not necessary. The cost advantage is obvious: A reduction of gas consumption of up to 50 % is possible. The inline gas analyser is operated intuitively via the touch screen of the electronic control unit. The devices can be flexibly integrated into existing systems via numerous interfaces and connections such as Ethernet, 4-20 mA or potential-free contacts. Retrofitting is also possible.

**100 % safe process for a maximum safe product**

## MAPY LE

Inline gas analyser based on the MAPY 4.0, especially for tubular bag packaging machines



### › BENEFITS

- Function and menu reduced to the essential, for a lean workflow
- Economical and safe
- Available as a single or double analyzer (O<sub>2</sub> or O<sub>2</sub>/CO<sub>2</sub>)
- Housing with protection class IP 54
- Lockable front panel, straight display
- Optional: additionally with needle for sample analysis

## BACK-PURGING DEVICE

for in-line gas analysers against blocked filters on gas inlets, especially for powdery products

Milk powder, coffee, flour – very often these products cause blocked filters on in-line gas analysers. The new back-purging filter from WITT prevents the clogging of the filters effectively and, if desired, fully automatically.

### › BENEFITS

- Uncomplicated in-line gas analysis
- Contaminants are collected
- Purges automatically or at the push of a button



## DOCUMENTATION SOFTWARE

Quality assurance includes not only the selection of the most effective checking tools but also complete documentation. WITT offers tailor-made software solutions for gas analysers data export for Windows. This allows detailed recording, complete documentation of these checks and evaluation of the measurement results. An important component for optimised quality control and thus securing long-term supply relationships and demonstrating regulatory compliance.

**The final component of quality control –  
for the trust of your customers**

## GASCONTROL CENTER

for MAPY and other integrated or separate gas analysers



### › FEATURES:

- Transmission of analysis data, date and time, user (name or inspector), batches and lines
- Data export interface for further processing of the measured data in MS EXCEL®
- Data transfer to Control Unit (touch screen control) including access codes
- Reading and logging of up to 21 analysers

## OBCC

for OXYBABY® and PA



### › FEATURES:

- Transmission of analysis data, date and time, user, products and lines
- Intuitive, clear user interface
- Convenient data management
- Graphical representation of the analysis data and developments
- Data analysis tool with filter options
- Data export as csv file (for further use in Excel) or as PDF

# WITT MEETS CUSTOMER REQUIREMENTS – YOUR TAILOR-MADE GAS ANALYSIS SOLUTION



“Depending on the product, type of packaging and production conditions, the best solution for quality assurance can vary. Are you in doubt which form of gas analysis is most suited to your process? No problem: We will be happy to advise you based on your individual needs. Talk to us about your requirements!”



And if you want to go one step further towards complete quality assurance:  
We offer even more ...



**Gas mixers,**  
which flexibly and reliably produce the optimum mixture for you at low cost



**Leak detectors,**  
which subject your packaging to a stress test and help to locate leaks



**Inline-Leak detectors,**  
which ensure 100% final inspection of the entire production – you can't do more

Further information: [www.wittgas.com](http://www.wittgas.com)

## OUR PRODUCT RANGE

### GAS CONTROL EQUIPMENT

- Gas mixing systems
- Gas metering systems
- Gas analysers
- Leak detection systems
- Gas pressure vessels
- Engineering of customised systems

### GAS SAFETY EQUIPMENT

- Flashback arrestors
- Non-return valves / check valves
- Quick couplers
- Safety relief valves
- Stainless steel devices
- Gas filters
- Pressure regulators
- Outlet points
- Lance holders
- Ball valves
- Automatic hose reels
- Test equipment
- Accessories
- Customised safety equipment

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