

# GAS ANALYSER MAPY 4.0

for O<sub>2</sub>, CO<sub>2</sub> or O<sub>2</sub>/CO<sub>2</sub>



reddot design award  
winner 2009

**Analysing System for the monitoring of protective atmospheres in food packaging (MAP). For continuous analysis (inline) and also intermittent sampling via a needle e.g. from food packs. A flexible analyser to guarantee quality and productivity of production processes. Available as a single or double analyser for carbon dioxide and oxygen.**

## Benefits

- minimum sample gas required for analysis of smallest volumes (e.g. food packaging) fast response time
- fast measuring results of sampling
- simple to operate via touch-screen
- reliable steady measuring results and high accuracy through pressure compensation
- simple calibration of sensor
- permanent monitoring of set limit values
- alarm signals are given if the set limits are exceeded and a potential free contact operates to e.g. auto-stop your machine to avoid quality problems
- easy to clean stainless steel housing for maximum hygiene, splash-proof
- USB connection for file transfer by USB memory stick
- Ethernet connection for network integration
- internal audible alarm
- measured data storage
- administration of product names
- user management for measurement personalisation

## Options

- fully automatic calibration
- software GASCONTROL CENTER for recording of results (see separate data sheet)
- plug set for external connection of signals
- model for higher inlet pressures
- bar code scanner for product names or user selection

## Equipment selection

Applications	Analysis	Gases			Type of equipment
		O <sub>2</sub>	CO <sub>2</sub>	O <sub>2</sub> /CO <sub>2</sub>	
Food	Sampling				
	Continuous Analysis				
•	•	•	•	•	MAPY 4.0 S <sup>3)</sup>
•		•	•	•	MAPY 4.0 L <sup>3)</sup>
•	•	•	•	•	MAPY 4.0 S+L <sup>2) 3)</sup>
•		•	•	•	MAPY 4.0 P <sup>1) 3)</sup>

<sup>1)</sup> without pump, with inlet pressure regulation

<sup>2)</sup> with 2 chemical sensors for oxygen

<sup>3)</sup> gases to be specified

All versions also available with zirconia measuring cell for O<sub>2</sub>. Please add **Zr** to the model type.

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## Measuring systems

Gases		Measuring system	Measuring range	Repeatability	Response time	Service life
	O <sub>2</sub> for sampling	chemical measuring cell	0-100%	± 0.2%	6 sec.	approx. 2 years in air
	O <sub>2</sub> for continuous analysis	chemical measuring cell	0-100%	± 0.2%	10 sec.	approx. 3 years in air
optional	O <sub>2</sub> for sampling and for continuous analysis	zirconia measuring cell	0-100%	± 0.1%	4 sec.	long lifetime
	O <sub>2</sub> for sampling and for continuous analysis	paramagnetic measuring cell	adaptable please indicate	dependent on measuring range	5 sec.	long lifetime
	CO <sub>2</sub>	infrared measuring cell	0-30% 0-100% please indicate	± 0.5%	6 sec.	long lifetime

<b>Type</b>	MAPY 4.0
<b>Gases</b>	O <sub>2</sub> , CO <sub>2</sub> or O <sub>2</sub> /CO <sub>2</sub> not for flammable, corrosive or toxic gases!
<b>Temperature range (gas/environment)</b>	0 °C to +40 °C (+32 °F to +104 °F)
<b>Gas connections</b>	
<b>Permanent measuring</b>	lance, hose connection for PK 6/4 (exhaust) integrated measuring gas pump
<b>Sample measuring</b>	needle (exhaust) integrated measuring gas pump
<b>Calibration (full automatic)</b>	hose connection for PK 6/4
<b>Inlet pressure</b>	
<b>S-version</b>	max. 0.3 barg
<b>P-version</b>	1.5 barg – 10 barg
<b>Calibration</b>	
<b>Gas consumption</b>	approx. 1 l/min
<b>Calibration time</b>	the real gas consumption for calibration is depending on installation. optimal: 240 sec/calibration
<b>Alarm signals</b>	2 potential free contacts for min. and max. settings (adjustable for each gas)
<b>Interfaces</b>	RS 232 with ASCII-output of date, time, measured value USB by memory stick for profiles, product and user data RJ45 Ethernet FTP-Server for profiles, product and user data, software Update analog output 4-20 mA or 0-10 V
<b>Housing</b>	stainless steel, splash-proof
<b>Weight</b>	approx. 7.2 kg
<b>Dimensions (HxWxD)</b>	approx. 110 x 300 x 260 mm (approx. 4.33 x 11.81 x 10.24 inch)
<b>Voltage</b>	230 V AC 50 / 60 Hz 110 V AC 50 / 60 Hz
<b>Power consumption</b>	230 V AC / 0.12 A
<b>Approvals</b>	Company certified according to ISO 9001 and ISO 22000 CE-marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU  for food-grade gases according to: - Regulation (EC) No 1935/2004  Cleaned for Oxygen Service according to: - EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems