

# CheckMate 3

## Headspace gas analyser for quality control of Modified Atmosphere Packages (MAP)



## Flexible, fast and accurate

If one thing is important in branding it's "repeatability" —being able to deliver the same consumer experience, time after time after time. How to make sure your product lives up to buyer expectations? Test, test, test—preferably with a reliable gas analyser like CheckMate 3.

CheckMate 3 lets you test gas-flushed packages fast and cost-effectively—a necessity for high-volume brand-name manufacturing. Operators can tell at a glance if gas composition is within the required levels. It also provides the traceability you need: essential data about each and every package can be stored in the unit itself or transferred either to the CheckMate 3 software or third-party software. And because different products have different testing requirements, CheckMate 3 can be adapted to virtually any quality control system, making brand consistency easier than ever to maintain.

### Benefits

- Saves labour time and paperwork due to automatic data logging
- Easy transfer of quality-control data to the CheckMate PC software or third-party software
- Reliable quality control of gas flushed products
- Easy operation – a minimum of training required
- Low maintenance – 12 months between each calibration

### Features

- **NEW:** Large easy to read 5" colour display with touch function (A 91% bigger screen compared to CheckMate II)
- Available for either oxygen (O<sub>2</sub>) or combined oxygen/carbon dioxide (O<sub>2</sub>/CO<sub>2</sub>) measurement
- Very small sample volume requirement (from 3 ml)
- Data transfer via Ethernet/(LAN), USB or RS232
- Flexible configuration of test scheme, e.g. logging of operator name, batch number, product line, etc.
- USB connection for external keyboard and bar code scanner
- Optional built-in printer

# HOW DOES IT WORK?

MAP products are safe and easily tested with the optional SmartPen

**1:** The first step in an easy and reliable quality-control process is to identify the correct product using the product's bar code or by selecting it manually on the CheckMate 3. Program selection ensures that the correct test parameters are set and the right user-defined questions about operator name, batch number, etc. are asked.

**2:** The next step is to insert the syringe through a septum and into the package. After insertion the unit can either start the test automatically or manually at the touch of a button.

**3:** During the test process a small gas sample is drawn into the analyser. The result appears immediately on the display, giving the operator an instant indication of a passed or failed result. Test data can then either be sent to a central database, stored in the unit or printed on the optional printer.



PBI-D5-Dash-gaslec-CM 3-EN-2

## Technical Specifications

Available configurations	O <sub>2</sub> (Zirconia)	O <sub>2</sub> & CO <sub>2</sub> (Zirconia/dual beam infrared)	O <sub>2</sub> (Electrochemical)	O <sub>2</sub> & CO <sub>2</sub> (Electrochemical/dual beam infrared)
Key features	Our fastest and most accurate oxygen sensor	Our fastest and most accurate oxygen sensor combined with a full-scale temperature compensated carbon dioxide sensor	The electrochemical sensor is not cross-sensitive to alcohol or carbon monoxide. Expected sensor lifetime is 2 years in atmospheric air	The combined O <sub>2</sub> /CO <sub>2</sub> electrochemical analyser features a unique compensation for both temperature and cross sensitivity to CO <sub>2</sub> in the O <sub>2</sub> reading
Sample volume	3 ml	6 ml	5 ml	6 ml
Sample time	5 sec	10 sec	7 sec	10 sec
Measuring range	0-100%	0-100%	0-100%	0-100%
Resolution	O <sub>2</sub> : 0.001%	O <sub>2</sub> : 0.001% / CO <sub>2</sub> : 0.1%	O <sub>2</sub> : 0.1% / CO <sub>2</sub> : 0.1%	O <sub>2</sub> : 0.1% / CO <sub>2</sub> : 0.1%
Sensor accuracy at 1% O <sub>2</sub> and 20% CO <sub>2</sub>	± 0.01% oxygen	± 0.01% oxygen and ± 0.8% carbon dioxide	Better than ± 0.3% oxygen	Better than ± 0.25% oxygen and ± 0.8% carbon dioxide
Heating time	10 min	10 min	1 min	10 min
Dimensions & weight	180 x 315 x 220 mm (HxWxD), 3.7 kg			
Power supply	100-240 VAC, 50-60 Hz			
Options	Built-in printer, CheckMate PC software, SmartPen – retractable syringe, Can Piercer for testing cans and wine bottles, bar code scanner, standard consumable kit ( part no. 300436 )			
Connections	USB, Ethernet (RJ45), RS232 (DB9)			
Memory	A minimum of 1,000 programs, 10,000 measurements depending on the set-up			
Third-party software compatibility	Mettler-Toledo FreeWeigh.net, Sartorius ProControl (WinSPC), OCS ComScale NT, Microsoft SQL database Bizerba_statistics.BRAIN			

Specifications subject to change without notice - further specifications are available in the User Guide which can be downloaded on [www.dansensor.com](http://www.dansensor.com)