

# MapScan&MicroMapScan Portable Gas Analyzer for MAP



### Introduction

MapScan&MicroMapScan is a hand-held gas analyser for the testing of MAP products within different industries e.g. the pharmaceutical, and the food & beverage industry. The analyser is small, robust, practical and ergonomically designed. MapSan&MicroMapScan is able to test oxygen and carbon dioxide using a syringe needle for gas sampling. The MapScan&MicroMapScan is idea for machine and product setups.

MapScan&MicroMapScan is battery operated and can be powered by rechargeable battery. MapScan&MicroMapScan is equipped with EC sensor for O<sub>2</sub> and NDIR sensor for CO<sub>2</sub>. MapScan&MicroMapScan remembers up to 40 measurements.

MapScan&MicroMapScan is especially designed for those who need the advantages of a very portable unit, which can offer a good accuracy. Especially the accuracy of the CO<sub>2</sub> sensor in hand-held devices is one of the best on the market.

The rugged carrier case protests the MapScan&MicroMapScan gas analyser during transport and when not in use. Accessories can be stored in the carrier case as well.

### **Features**

- Small compact hand-held gas analyser
- High measuring accuracy due to stateof the art technology
- Battery power for min. 2500 measurements for the O<sub>2</sub> and CO<sub>2</sub> version
- Memory function
- Measures O<sub>2</sub> or O<sub>2</sub>/CO<sub>2</sub> combined
- Short measuring time
- Low sample gas volume
- Easy calibration
- Robust and sturdy design
- Rugged carrier case
- Needle protection in the housing





## MapScan&MicroMapScan Portable Gas Analyzer for MAP

### **Principle of operation**

### Oxygen

The MapScan&MicroMapScan O<sub>2</sub> is based on an electrochemical sensor. The sensor operates like a kind of battery producing a current corresponding to the concentration of the gas passing the sensor. The value of the current is converted into a concentration value and shown in the display. The sensor is remarkably sturdy and stable, the readings are highly repeatable and sensor is very fast. The sensor will not saturate in high oxygen concentrations, which means that the MapScan&MicroMapScan O<sub>2</sub> can be used across a broad range of applications with a measuring range from 0-99.9% with a high resolution – still with high speed and accuracy.

## Carbon dioxide

The CO<sub>2</sub> sensor is a self-contained, non-dispersive IR sensor with IR source and single wavelength filter. There are no moving parts and the sensor is very sturdy. The CO<sub>2</sub> sensor range is 0-99.9%. The sensor only needs calibration every 6 months and the reading is not influenced by humidity, ambient air pressure and temperature.

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Available Configurations	O <sub>2</sub> (Electrochemical)	O <sub>2</sub> &CO <sub>2</sub> (Electrochemical and NDIR)
Key features	Not cross-sensitive to alcohol or	The combined O <sub>2</sub> /CO <sub>2</sub> analyser
	carbon monoxide.	features a unique compensation
	Electrochemical sensors have	for both temperature and cross
	an expected lifetime of 2 years	sensitivity to $CO_2$ in the $O_2$
	in air	reading
Sample volume	Min.10ml@6s(MapScan)	Min.15ml@10s(MapScan)
	Min. 6ml@6s(MicroMapScan)	Min. 10ml@10s(MicroMapScan)
Sample time	6~10秒	6~10秒
Measuring range	0-99.9%	0-99.9%
Resolution	0.1% O <sub>2</sub>	0.1% O <sub>2</sub> and CO <sub>2</sub>
Sensor accuracy 1%O <sub>2</sub>	Better than +/-0.3% Oxygen	Better than +/-0.25% Oxygen
and 20%CO <sub>2</sub>		and Better +/-2% Carbon dioxide
Heating time	None	None
Dimensions & Weight	43 x 75 x 160 mm (HxWxD)	
	0.45kg	
Power supply	Recharge battery powered (up to 2,400 measurments)	
Options	Standard consumable kit (Part No. 280244)	
Connections	None	
MicroMapScan	MapScar MapScar	1



