

Data sheet

CheckPoint

Hand-held gas analyser for spot testing

- O₂, O₂/CO₂ or CO version with memory function



Features

- Small compact hand-held gas analyser
- High measuring accuracy due to state-of-the-art technology
- No sensor saturation
- Battery power for min. 2500 measurements for the O₂ and CO₂ version. Min. 400 measurements with the CO version
- Memory function
- Measures CO, O₂ or O₂/CO₂ combined
- Short measuring time
- Ergonomic design
- Low sample gas volume
- Easy hot key calibration
- Robust and sturdy design
- Easy navigation in the user interface
- Rugged carrier case, free of charge
- Needle protection in the housing

Introduction to the CheckPoint

CheckPoint 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. CheckPoint is able to test oxygen, carbon dioxide and carbon monoxide using a syringe for gas sampling.

CheckPoint is battery operated and can be powered by both rechargeable and ordinary batteries. The CO and O₂ versions are equipped with an electrochemical sensor and the O₂/CO₂ version is equipped with an electrochemical and an infrared sensor. CheckPoint remembers up to 10 measurements including the latest one. The large and easy readable LED based display gives you the result in a few seconds.

CheckPoint is available in three versions:

- CheckPoint O₂ for oxygen only
- CheckPoint O₂/CO₂ for combined measuring of oxygen & carbon dioxide
- CheckPoint CO for carbon monoxide only

Calibrated and ready to use

CheckPoint comes with a certificate of calibration and only needs to be re-calibrated once a year. The operator never needs to worry about compensation for air pressure or flow verification because this is all taken care of automatically.

If you wish to re-calibrate the O₂ version yourself, this is a very simple process. You simply use the automatic hot key calibration routine available in the menu.

Fast, sensitive and accurate

This product 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 CO₂ version in hand-held devices is one of the best on the market. Due to new state-of-the-art technology, PBI-Dansensor can now offer a very satisfactory solution to this point also.

Carrier case included

The new rugged carrier case protects the CheckPoint gas analyser during transport and when not in use. Accessories can be stored in the carrier case as well.



Carrier case:
Free of charge

 **PBI Dansensor**

Best choice for gas and permeability instrumentation

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Principle of operation

Oxygen and carbon monoxide

The CheckPoint O₂ and CO versions are based on an electrochemical sensor. The sensor operates like a solid state battery, which produces a small voltage or electro motive force (EMF) in the presence of oxygen. This EMF is directly related to the oxygen concentration of the gas being passed into the sensor, which is then shown in the LCD display. The sensor is remarkably sturdy and stable, the readings are highly repeatable and the sensor is very fast. The sensor will not saturate in high oxygen concentrations, which means that the CheckPoint O₂ can be used across a broad range of applications with a measuring range from 0-100% with a resolution of 0.1% - still with high speed and accuracy. The measuring range for the CO version is 0-0.8%.

Carbon dioxide

The CO₂ sensor is a self-contained, non-dispersive IR sensor with IR source and dual wavelength filter. There are no moving parts and the sensor is very sturdy. The CO₂ sensor range is 0-100%. The sensor only needs calibration once a year and the reading is not influenced by humidity, ambient air pressure or temperature.

Common specifications

General	
Auto power off after 1 minute	
Memory function for 10 measurements (also after battery replacement)	
Display hold function (also after power off)	
Charging time for NiMH-batteries: 3 hours (auto off)	
Cabinet	
Dimensions:	74 x 63 x 135 mm (HxWxD)
Weight:	0.5 kg
Cabinet:	IP53 & anodized aluminium
Others	
Power supply: (recharge only)	230 VAC or 115 VAC 50-60 Hz Max. 70 VA nom. 45VA
Options:	External power supply Rechargeable NiMH battery pack Arm wrest holder
User interface	
Display:	3 digit LED for each gas 3 function buttons: on/off, start measuring and memory Adjustable for right or left hand users

Sensor system

O ₂ version	
Sensor type:	Electrochemical minimal cross sensitivity to CO ₂
Range:	0 - 100%, resolution 0,01%
Accuracy:	2% relative in the range of 10% -100%, 0.2% absolute in the range 0 - 10%
Sample volume:	<15 ml
Lifetime:	min. 2 years
CO ₂ version	
Sensor type:	Infrared, temperature compensated
Range:	0 - 100%, resolution 0.1%
Accuracy:	3% absolute in the range of 20% - 100%, 2% absolute in the range of 0 - 20%
Sample volume:	<15 ml
Lifetime:	>2 years
CO version	
Sensor type:	Electrochemical
Range:	0 - 0.8%
Accuracy:	+/- 5% relative. Min. +/- 100 ppm
Sample volume:	>30 ml
Lifetime:	>2 years
Measuring system - common for O ₂ and CO ₂	
Measuring time:	10 sec. (user extendable/shortend)
Pump:	Built-in pump, max -200 mbar vacuum, expected lifetime > 500 hours (180,000 measurements)
Calibration:	Automatic calibration gas detection (air, 0%/ 100% CO ₂ gas)
Measuring system for CO version	
Measuring time:	55 sec. (user extendable/shortend)
Pump:	Built-in pump max -200 mbar vacuum, expected lifetime >500 hours (30,000 measurements)
Calibration:	One known gas plus zero off set

PBI-DS-Dash-gastec-CP-UJK-1



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