



GAS	MEASURES	APPLICATION
OXYGEN	PERCENT	QUALITY
CARBON DIOXIDE		

SENSING TECHNOLOGY



BENCHTOP ANALYZER FOR QUALITY CONTROL/ CHECKS IN MODIFIED ATMOSPHERE PACKAGING

UNRIVALLED PERFORMANCE

- Patented Paramagnetic and Infrared technologies for high sensitivity monitoring and reliability
- Precision single or dual measurement operation
- Manufactured by Servomex - over 60 years' experience innovating and pioneering gas analysis with thousands of units used in the field every year

EASY TO USE

- Quick start up and use
- Small footprint that integrates easily into any location and saves space
- Mains or battery power options (8-36 hours battery runtime)

BENCHMARK COMPLIANCE

- CE marked and in compliance with EEC, EMC and WEEE Directives
- CE marked 100-240V/43-70Hz AC power supply

FLEXIBLE

- Accurate measurement of common gas mixtures used in MAP
- Internal pump with solenoid valve option for external vacuum pump or syringe sample draw
- Meets wide range of MAP testing needs specified by food processing and pharmaceutical industries

LOW COST OF OWNERSHIP

- Non-depleting technologies maximize availability and reduce maintenance/running costs
- Simplified calibration and ongoing maintenance

KEY APPLICATIONS

- MAP quality testing for food and beverage products
- MAP for packaged pharmaceuticals
- Equilibrium Modified Atmosphere Packaging (EMAP) fresh consumable produce testing
- Laboratory and research

For more information please contact us

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PRODUCT OVERVIEW

SERVOFLEX MiniFoodPack 5200

PORTABLES

ACCURATE AND RELIABLE ANALYSIS

When you work in industries producing products utilizing MAP - such as food production or pharmaceuticals - accurate and reliable gas mixture analysis is essential. You need equipment that not only delivers benchmark performance, but helps you test samples in the most efficient way possible.

The freedom and flexibility to undertake varied sampling methods is also important to you. The ideal solution will provide you with additional added-value aspects including long battery runtime, low operational costs, simplified ongoing maintenance and ease of use. And we don't believe you should have to compromise.

A NO COMPROMIZE SOLUTION

The MiniFoodPack throws a powerful punch, with its combination of intuitive ease of use, simple maintenance requirements and industry-leading O₂ and CO₂ monitoring performance, designed specifically for MAP quality testing.

This device uses state-of-the-art patented Paramagnetic and Infrared technologies, providing sensitive monitoring and great flexibility when it comes to sampling techniques; via internal pump, external vacuum pump or syringe draw methods.

SIMPLICITY AND REDUCED COSTS

Aside from its impressive analytical and sampling provision, the MiniFoodPack is simple and intuitive to use, allowing up to 200 measurements to be stored for subsequent download. This device also offers unbeatable value over product life, through simplified calibration and ongoing maintenance and the use of non-depleting sensing technologies, providing you with a holistic analysis solution that meets all your core needs.

USEFUL LINKS



PBTDSMiniFP5200 Rev. 0 Date: 05/20

These analyzers are not intended for any form of use on humans and are not medical devices as described in the Medical Devices Directive 93/42EEC.

Please note: *Whilst every effort has been made to ensure accuracy, no responsibility can be accepted for errors and omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards and guidelines. This document is not intended to form the basis of a contract.*

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TECHNICAL DATA SHEET

SERVOFLEX MiniFoodPack 5200



SPECIFICATIONS

GAS MEASURED	OXYGEN (O ₂)	CARBON DIOXIDE (CO ₂)
TECHNOLOGY	Paramagnetic	Infrared**
Variant	Standard (1dp)	All variants (1dp)
Full scale range (FSR)	0-100% O ₂	10%, 50%, 100%
Minimum output range	0-10% O ₂	0-10% FSR
Cell construction	Polymer (PPS)	316 stainless steel

** Allow 1 hour warm up to meet performance specification

PERFORMANCE		
Accuracy	±0.2% O ₂	±2% FSR
Zero drift per week	±0.4% O ₂	±4% FSR
Response time (T ₉₀)	<7.5 seconds	<7.5 seconds
Tilt effect	±0.3% O ₂ (22.5° from cal)	±1% FSR (15° tilt)
Power cycle offset	±0.4% maximum	N/A
Pressure effect	Directly proportional to ambient barometric pressure	<0.2% reading / mBar change in ambient pressure
Temperature coefficient zero	±0.2% O ₂ per 10°C (18°F)	±1% FSR per 10°C (18°F)
Temperature coefficient span	±0.3% O ₂ per 10°C (18°F)	±8.5% FSR per 10°C (18°F)

OPERATING ENVIRONMENT		
Operating ambient pressure range	1.013 x 10 ² kPa ±10% (1.013 bar ±10%, 14.69 psi ±10%)	
Operating ambient humidity range	0 to 95% RH, non-condensing	
Operating altitude range	-500 [†] to 5,000 [‡] meters (-1,640 [†] to 16,400 [‡] feet)	
Ingress protection	IP40 (without mA outputs), IP30 (with mA output)	
Ambient temperature range	OPERATION	STORAGE*
Analyzer	+5 to +45°C (+41°F to +113°F)	-20 to +60°C (-4°F to +140°F)
Power supply unit	0 to +45°C (+32°F to +113°F)	

SAMPLE CONDITIONS	
Sample gas	Clean, dry, non-flammable and non-toxic gases only Note: Though samples containing >5% CO ₂ are toxic they can be analysed if suitable precautions are taken
Sample inlet connection	Standard male luer fitting
Sample outlet connection	5mm OD stub compatible with optional QuickConnect barb fitting for 6.3mm (1/4" ID tube or adaptor to 1/4 NPT)
Inlet pressure	Solenoid valve: 0kPag (0psig) to 35kPag (5psig) Pump: 0kPag (0psig) to 3.4kPag (0.5psig)

† Below sea level

‡ Above sea level

* Storage below 21°C (70°F) is recommended to ensure optimum battery life

We recommend a calibration of the analyser after each power up

The performance specification has been written and verified in accordance with the international standard IEC 61207-1:1994 "Expression of performance of gas analyzers"



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PHYSICAL	
Weight	2.6kgs (5.7lbs) to 3.9kgs (8.6lbs) depending on configuration
Dimensions, WxDxH	W 150mm (6.0") x D 260mm (10.5") x H 300mm (12.0")

SAMPLE WETTED MATERIALS

	Common gas path in the multi purpose	Standard oxygen sensor	IR (infrared) sensor
302 stainless steel	•		
316 stainless steel*	•	•	•
430 stainless steel*	•		
Borosilicate glass		•	
Epoxy adhesive (EPO-TEK H72)		•	•
EPDM (ethylene propylene diene monomer)	•		
Gold		•	•
Krytox® GPL205 grease		•	
Kynar® (PVDF: polyvinylidene fluoride)	•		
Nickel	•	•	•
Nitrile	•		
PPS (polyphenylene sulphide)†	•		
PPS (polyphenylene sulphide) with PTFE (polytetrafluoroethylene)		•	
Platinum/iridium alloy		•	
Polysulphone	•		
Polypropylene		•	
Polystyrene*	•		
PTFE (polytetrafluoroethylene)*	•		
Sapphire			•
Silicon rubber	•		
Tinned copper	•		
Viton®	•	•	•

* Analyzer with solenoid valve only

† Analyzer with internal sample pump only

OPTIONS & ACCESSORIES

OPTIONS		
Internal pump	With user configurable timer, min. sample volume - O ₂ = 16ml, CO ₂ = 8ml	<input type="checkbox"/>
Solenoid valve	Permits additional flexibility for sampling, use external vacuum pump or syringe sample draw	<input type="checkbox"/>
Analogue output	One 4-20mA/0-20mA output per measurement	<input type="checkbox"/>
Rechargeable batteries	Advanced lithium ion batteries providing 8-36 hours use, depending on sensor selections	<input type="checkbox"/>
2 years spares	Recommended spares for two years operation, comprising replacement filters (5) and filter cap 'O' ring	<input type="checkbox"/>

Please tick the box for required options

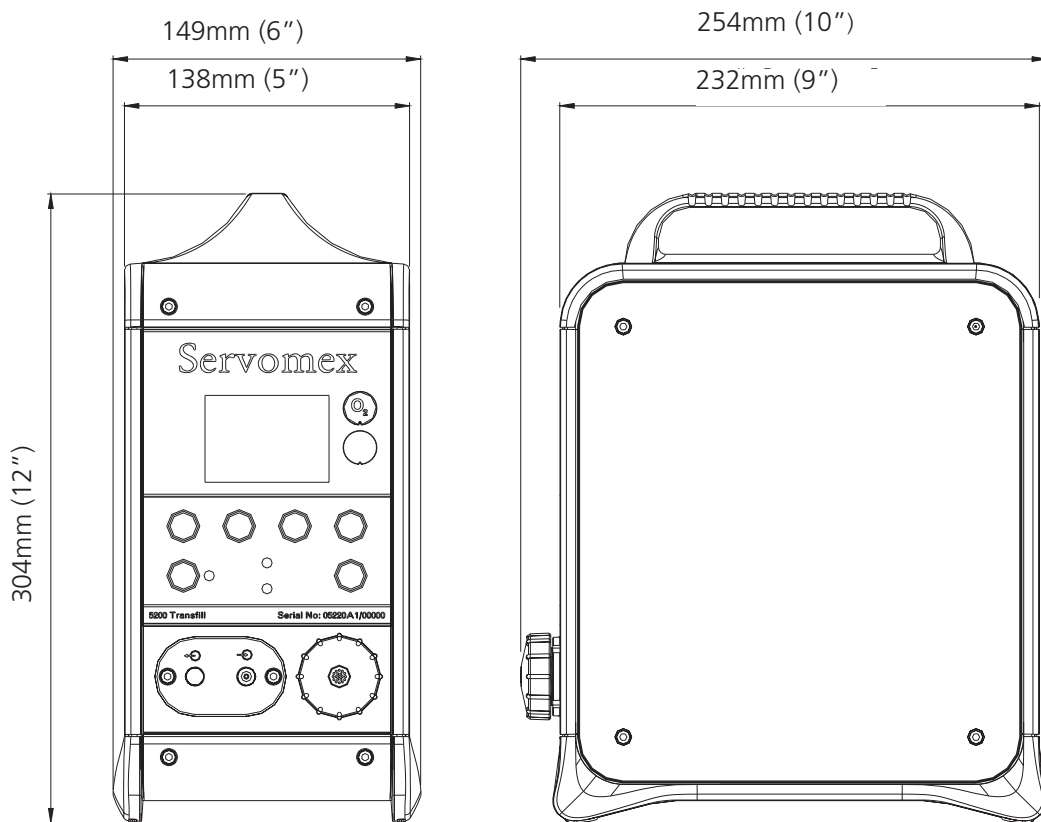
ACCESSORIES	DESCRIPTION	SPECIFICATION
Printer	Compact and simple to use	Mains powered or rechargeable Pack of five additional printer paper rolls
QuickConnect barb fitting	Simplify connection of gases with QuickConnect	Allows outlet connection to 6.3mm (1/4") ID tube
1/8" NPT adaptor	Ideal for QuickConnect hard pipe use	Allows outlet connection to 1/8" NPT pipe
2 years spares pack	2 years hassle-free operation	Replacement filters, sticky pads and syringe needles
Can-piercing kit	Allows the sampling of rigid container headspace	



COMPLIANCE

EC DIRECTIVES	This product complies with the EMC Directive, the Low Voltage Directive, and all other applicable directives.
ELECTRICAL SAFETY	Electrical safety to IEC 61010-1 Rated for "Overvoltage Category II" and "Pollution Degree 2"

DIMENSIONAL DRAWINGS



Dimensions shown in millimetres
(dimensions in brackets are in inches)



> WE'RE READY TO HELP

WHATEVER YOUR GAS ANALYSIS REQUIREMENTS, WHEREVER YOU ARE

PBTD5MiniFP5200 Rev. 0 Date: 05/20

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