



THE WORLD'S MOST PORTABLE VO2 ANALYSER



SportsMed Products Limited

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VO2 MASTER PORTABLE METABOLIC ANALYSER

The VO2 Master Analyser is revolutionising how coaches, researchers and health professionals approach performance and metabolic assessment globally. As the world's most portable, wireless, and user-friendly metabolic analyser, VO2 Master allows professionals to test VO2, ventilation, and other critical physiological metrics in real world environments - on the pitch, in the gym, on the bike, indoors or out.

Developed by Anesthetist Dr. Andrew Sellars and IT expert Peter O'Brien and validated in peer-reviewed research, the VO2 Master provides you lab-grade data with no hoses, no wires or backpacks at a lower cost than traditional metabolic analysers. Our customers receive instant data and reports that drive training decisions, help elevate performance, and deliver measurable results.



Fully Portable & Wireless Design

Compact, lightweight analyser with no hoses, wires, or backpack units.

Real-Time Metabolic Data

Measures VO2 max and submax, VE, VTs, tidal volume, and respiratory frequency. Real-time reporting of data that can be viewed from anywhere in the world. Immediate access to data after testing for customisation. Data can be stored locally on your device or in the cloud

Guided mobile app (iOS and Android)

Simple-to-use mobile app for client info, protocol choice, data display, and storage.

Fast two step calibration wherever you are

Calibration syringe quick and easy to use indoors or outdoors. Flow calibration and sensor calibration takes just 2-4 minutes depending on test.

Research grade accuracy, zero lab constraints

Validated in multiple academic studies against industry-standard metabolic systems.

Ready-made and Custom Protocols

Select Bruce, Modified Bruce, 5-1-5 Intervals, Free, RMR, plus swim and bike variants—or design your own in the app to match your coaching philosophy.

Secure data handling & multilingual reporting

Breath-by-breath data streams directly to the paired device—there is no onboard storage, protecting athlete privacy. Reports can be generated in English, German, French, Spanish, Italian or Dutch for instant sharing with coaches and clinicians.

No Subscription or Membership Fees

No subscription fees for the app or cloud (App is available for download on Android and iOS) and no membership fees.

Certified wireless & distributor-friendly compliance

The embedded BMD-350 module is certified under Bluetooth SIG (ID D037593), FCC (2AA9B05) and EU CE EN 60950-1 / EN 300 328 / EN 301 489-17 standards

COMPLETELY MOBILE



Why VO2 Master?

VO2 Master provides an innovative and lightweight solution to monitor the body's response to performance and wellness training.

VO2 provides athletes, trainers and health enthusiasts with the tools they need to achieve their goals. Using the portable analyser, you can personalise your clients training programme to their physiological needs, making it easier than ever to achieve optimal performance and a healthier life.

The Portability You Want

Whether you are in the field, on the road, or stationed in a lab, the VO2 Master mobile platform enables metabolic assessments wherever you are. This innovative approach offers convenience, and redefines real-world data collection.

Streamline workflows and boost productivity with instant access to share and view assessment reports.

Download the FREE VO2 Master Magazine app and connect to your wireless analyser today.



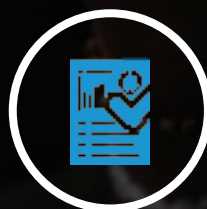
VO2MAX - Threshold



Training Zones



Resting Metabolism



Instant Report



Free Mobile App



Remote Access

Performance Testing

- Maximal Metrics - **VO2Max** and **HRmax**
- Ventilatory Thresholds - **VT1** and **VT2**
- Training Zones
- Breathing Metrics

Metabolic Testing

- Resting Metabolic Rate (RMR)
- Effective Weight Management Planning
- Resting Heart Rate and Variability

Guided App Protocols

Use the VO2 Master App's pre-designed assessments templates to create your own to fit your testing requirements.

- GXT (Graded Exercise Test)
- Intervals
- FMR
- 515

VO2 MASTER IS COMPATIBLE WITH:



Muscle
Oxygenation



Heart Rate



Power



Core Body Temp



Speed



Cadence



Smart Trainer



EMG

POLAR

GARMIN

DELSYS

wattbike

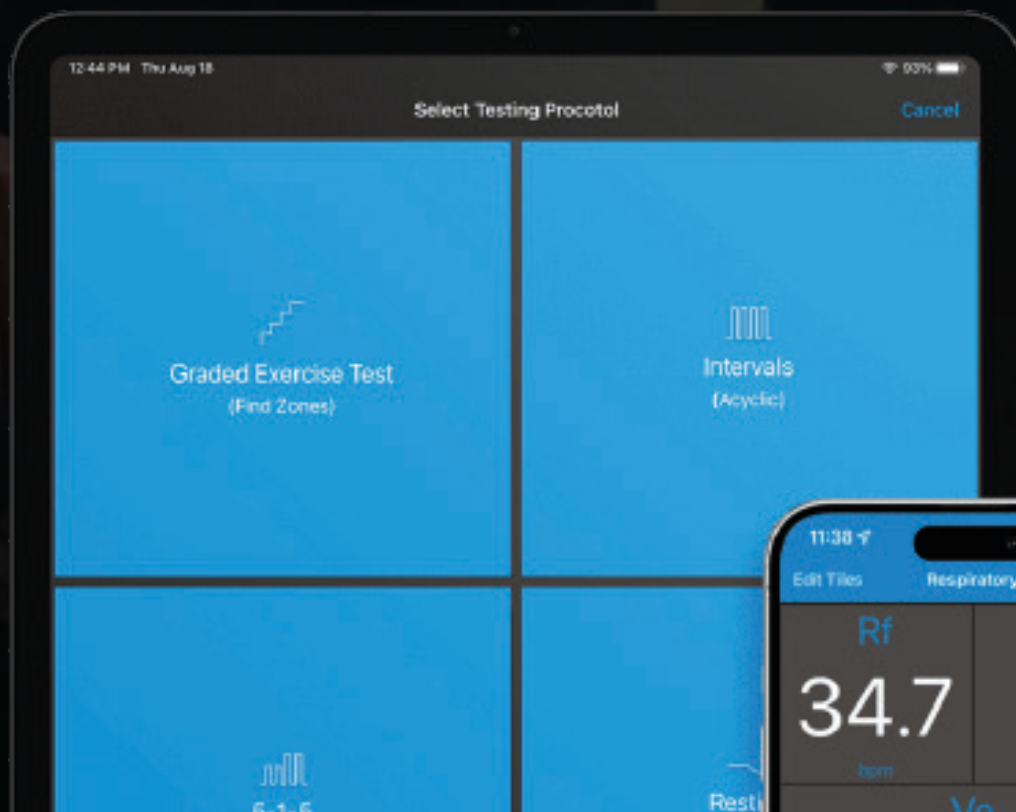
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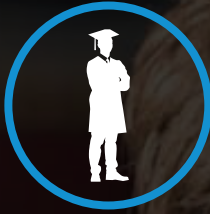
TRAIN.RED

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Gyms & Wellness



Universities



Hospitals



Professional Sports



Physiotherapy



Emergency Services

Technical Specifications

- Dimensions (without mask) - 134mm x 92mm x 53mm
- Weight - 350g (230g unit, 120g mask)
- User Interface - On/Off button, RGB LED indicator, phone and tablet application
- Wireless Capability - Standard Bluetooth Protocol Range* Bluetooth 4-30ft (10m) / Bluetooth 5- 90ft (30m)
- Mask - Hans Rudolf 7450 V2
- Internal Protection Rating - IP33 rating. Safe from particles over 2.5mm and water falling up to 60° from vertical
- Humidity Control - Drying desiccant tubing and hydrophobic filter
- Local Storage - None. All data is collected into the phone app or Garmin data field

Standard Testing Metrics

Exercise Test/CPET

- VO2 (Oxygen Consumption): mL/kg/min
- Power (watts)
- Heart Rate (via Bluetooth-compatible monitor Polar strap)
- Ventilation (VE): L/min
- Respiratory Frequency: bpm
- Tidal Volume: L

RER (Resting Energy Expenditure) kcal/day

- Goal Daily Caloric Intake: calories
- Resting Heart Rate: bpm
- Heart Rate Variability score
- Body Mass Index

Sensor Specifications

- O2 Accuracy (0-100%) - $\pm 1\%$
- Flow Accuracy with syringe calibration - $\pm 2\%$
- Flow Accuracy without syringe calibration - $\pm 4\%$
- Flow Sensor Type - Differential Pressure
- Oxygen Sensor Type - Galvanic Fuel Cell
- Gas Sampling System - Passive, pump-less
- Oxygen Sensor Replacement Interval - 12 Months, or less when testing heavily, daily
- Drying Desiccant Tube Replacement Interval - 12 Months, or 50 tests, or after a water ingress
- Calibration - Ambient. Optional calibration for flow using a syringe
- Pressure (300-1100 mbar/ 50-110 kPa) - $\pm 0.25\%$
- Humidity (0-99%RH) * - $\pm 3\%$
- Temperature (15-45°C) * - $\pm 1^\circ\text{C}$

*Readings are not ambient readings and are based on the sampled flow through the analyser.

Health and Safety

Single-Use Filter Disc Filtration Performance

- NaCl Penetration at 32 LPM - $< 3.00\%$ ¹
- NaCl Efficiency at 32 LPM - $> 97.00\%$ ¹
- Pressure Drop at 32 LPM - $< 0.8\text{mm H}_2\text{O}$ ¹
- Bacterial Filtration Efficiency (BFE) - $> 99.945\%$ ²
- Virial Filtration Efficiency (VFE) - $> 99.909\%$ ²
- Air Permeability - $> 200\text{ CFM}$ ³
- Mask Material - Autoclavable silicone
- Airway materials - Mask adapter and oxygen sensor gas channel cartridge are made of a high-grade polymer
- VO2 Master Analyzer Outer Shell and Main Body - High-grade polymer

¹ Tested in accordance with TS18130 NaCl 0.1-micron particle size.

² Tested in accordance with Spec MIL-M-36954C By Nelson Labs.

³ Tested in accordance with ASTM Spec ASTM D373.

Sensor Specifications

- Temperature Range - 17 - 45°C
- Altitude - Up to 10,000 ft
- Headwind - Headwind decreases accuracy
- Pressure - 300 - 1100 mbar (50 - 110 kPa)
- Humidity - 0 - 70% Non-Condensing Ambient Air. Avoid testing in the rain.

Phone Application

- Supported Platforms - iOS, Android
- Bluetooth Sensor Compatibility - VO2 Master Analyzer, Heart Rate, Cadence, Speed, Power, Muscle O2 Saturation
- Graphical Display - Live graphs, live numbers, whole test summary, post-test graphs
- Sharing Capabilities - Email data and report, and print report from app

Certifications

Wireless Transducer: Contains a BMD-350 pre-certified wireless module D037593 Bluetooth Declaration ID: D037593 FCC ID: 2AA9B05 IC RSS-210 modular qualification: 12208A-05

CE EN 60950-1:2011-013.1

(a) Health and Safety of the User CE EN 301489+17V2.2.13.1

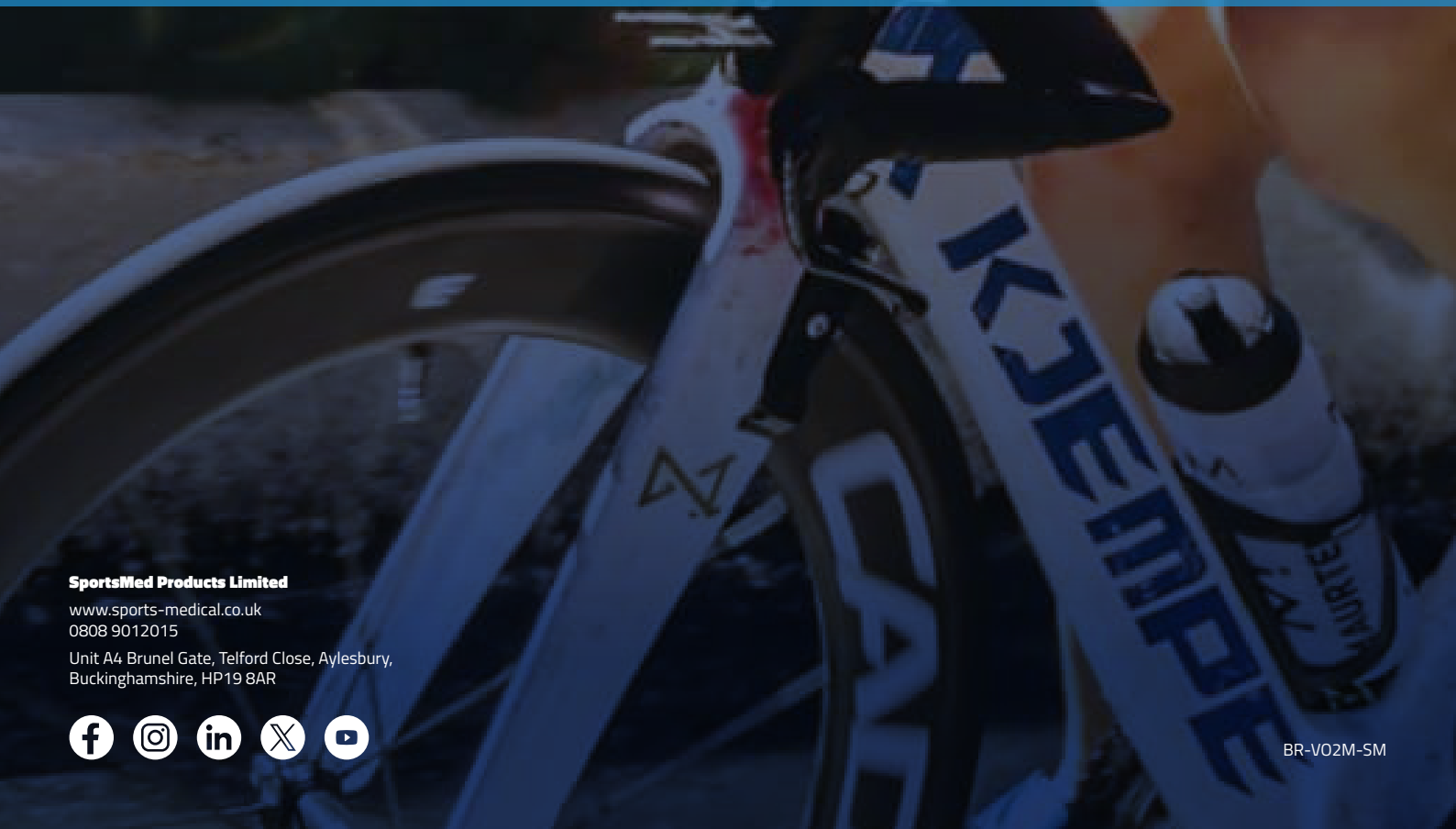
(b) Electromagnetic Compatibility CE EN 300 328 V1. 8.1 3.2: Effective use of spectrum allocated



WE HELP PEOPLE TO GET MOVING

SportsMed Products Ltd is dedicated to getting people moving. We are constantly researching what is new in the market and always looking to uncover new technologies that will help people to recover from injuries or to perform better.

Exclusive distributors of AlterG, as well as many other innovative products to improve fitness, health and recovery, we bring an outstanding service for our customers.



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