

The MedGraphics VO<sub>2000</sub> Portable Metabolic Testing System provides the most versatile, comfortable, easy-to-use, accurate and affordable metabolic testing available. Take your VO<sub>2</sub> testing in the laboratory or in the field to a higher level.



#### Versatile

The MedGraphics VO<sub>2000</sub> is designed to meet the needs of the research center, sports medicine clinic, sports team, nutritionist, rehab facility, athletic club and classroom. The VO<sub>2000</sub> can operate with direct connection to a PC, store data in on-board memory for later download or monitor remotely with continuous data feed from the telemetry option.

#### Comfortable

The compact, lightweight design may be worn with a contoured athletic belt or three point harness. The unique preVent mask is form fitting, comfortable and adjusts to all facial contours. It eliminates "hot spots" and is significantly lighter than standard masks. Importantly, the preVent mask does not obstruct vision thereby reducing the risk of injury and the restricted feeling of other masks.

#### Easy-To-Use

Power-up to test time requires less than 15 minutes! Its small size makes it highly portable and with the quick connect, setup is a snap. The VO<sub>2000</sub> uses a patented, hands-free Auto-calibration. No calibration syringes or gases are ever required but may be used for verification at any time.

#### Accurate

The VO<sub>2000</sub> uses patented sampling techniques and enhanced gas analysis to provide highly accurate and reliable metabolic measurements under a variety of testing conditions.

#### Affordable

The VO<sub>2000</sub> is one of the most affordable metabolic systems available. It comes complete with all the accessories you need to start testing. The Breeze Lite software runs on Windows 98/2000/NT/XP PC's and requires no additional hardware components. Results can be printed on a standard PC compatible printer



**Top:** The remarkable MedGraphics VO2000 system weighs in at only 740 grams.

**Bottom:** In-field use of the MedGraphics VO2000 with optional real-time telemetry.

## Innovative Technology

- Unique, hands-free AutoCal System requires no calibration syringe or gases although they may be used for verification at any time.
- Patented Electronic Variable Sampling provides continuous sample flow and insensitivity to pressure and temperature artifacts.
- Patented preVent™ Pneumotach and preVent™ Mask provide accuracy and comfort without bulky connections and headgear and is insensitive to turbulence.
- Optional Telemetry system allows you to measure the true metabolic response of physical activity under “real world” conditions.



### Weight

- 740 grams (1.63 lbs.)

### Dimensions

- Width: 10.5 cm (4.25")
- Depth: 14 cm (5.5")
- Height: 5 cm (2")

### Operation

- Mean Sample Flow: 50cc/min
- Peak Sampling Rate: 150 Hz
- System Response: 0-90% step change <8 seconds
- Auto Cal/Zero Time: Typically <45 seconds

### Volume Measurement-preVent Pneumotach

- Bi-directional differential pressure
- Low Flow Range: 2-30 L/Min
- Exercise Range: 20-200+ L/Min
- Accuracy:  $\pm 3\%$  of Absolute Volume

### O2 Analyzer

- Type: Galvanic Fuel Cell
- Range: 0-96%
- t90: <100 ms
- Accuracy:  $\pm 0.1\%$

### CO2 Analyzer

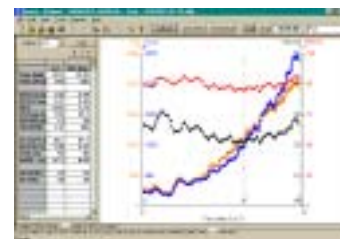
- Type: Non-Dispersive Infrared
- Range: 0-10%
- t90: <100 ms
- Accuracy:  $\pm 0.2\%$



## Breeze Lite Software

Easy to use VO<sub>2000</sub> software makes it possible to rapidly perform high quality resting metabolic and exercise analysis. Configurable screens and graphs offer powerful assessment tools. Important markers such as anaerobic threshold can be automatically detected, even from a submaximal test!

Optional software expands the capabilities specific to your testing needs. Reports can be printed on any Windows compatible printer.



### Data Acquisition and Storage

- Data is transmitted between each breath interval. Data storage is in breath rate or time based packets, at the user's option
- Breath-Rate Data: 3, 6 or 9 breaths
- Time Data: 10, 20, 30, 40, 50 or 60 seconds

### Telemetry Receiver

- Type: Bi-directional 2.4 GHz digital spread spectrum
- Interface: RS232

### Heart Rate Measurement

- 5 volt logic TTL input & Polar CIC Interface

### Power Requirements

- 12V DC @ 650mA (Peak)

### Environmental Specifications

- Operating Range: 0-35°C
- Humidity Range: 0-98% non-condensing
- Sample Condition: Dry to Saturated

### Software Options

- Report Designer
- External Device Control
- Script Designer
- Multi-User
- Query Database
- ExerScript™
- Exercise Consult™
- User Defined Predicteds