Oxycon Pro® - The New Features

Compact stress testing unit for precise and reliable determination of cardiopulmonary and related parameters in all patient groups. Oxycon Pro® is designed for on-site use in highly variegated environments, allowing breath-by-breath (open system) or averaged (mixing chamber) data acquisition intrabreath, breath-by-breath (open system) or averaged (mixing chamber) data.

The optional 12-lead ECG is fully integrated in the system, i.e. operation of the ECG equipment is part of the standard configuration.

Software and Hardware

- Compact design with integrated O, CO, and CO₂ analysers
- 13-lead ECG (optional)
- Ventilation measurement in a highly-precise, bidirectional, digital volume sensor (Triples)
- Automatic calibration
- Position computer technology
- V-set printer
- Interface for peripheral equipment

Measurement Range

- Ventilation (V̇):
  - (FD): 0 to 300 L/min
  - (MIC): 0 to 2 L/min
- CO₂ analyser (OXY): 0 to 5 L/min
- IBER: 0.1 to 2.8 L/min

Volume Sensor

- Volume: 0 to 10 L
- Accuracy: ± 5 mL or ± 2%
- Resolution: 1 mL
- Flow: 0 to 15 L/min
- Accuracy: ± 5 mL or ± 2%
- Resistance: < 100 kΩ

Analyzer

- High-speed analyser: differential paramagnetic principles
  - Ranges: 0 - 25%, 0 - 60%, 0 - 100%
- Accuracy: ± 0.5% ± 0.2% ± 0.5%
- Resolution: ± 0.1%
- Stability: ± 0.07% per day
- Minimum time: ± 0.04 min

ECG

- Leads: 12 (ECG, EOG, and EOG)
- Interface: RS 232
- Frequency Range: 0.05 to 100 Hz
- Gain: 5, 10, 20 mV/m

Dimension/Weight

- Height/Mass: 24” x 24” x 8” (61 cm x 61 cm x 20.3 cm)
- Weight: 19 kg (42 pounds)
- Power supply: 180 to 240 V, 50/60 Hz, 75 Watts

Oxycon Pro® in Detail:

- Interface for peripheral equipment
  - Pentium computer
  - Ink-jet printer
  - Telephone

Standard protocols:

- Patient Brief
- Automatic Volume Calibration
- Volume Calibration via manual calibration pump
- Automatic Air Analysis Calibration
- Indirect Ventilation
- Ventilation Flow-Halme
- Ventilation Flow-Volume
- Ventilation Flow-Volume

Oxycon Pro®

- Breath by Breath
- Intrabreath
- Mixed Gas
- Automatic Gas Analyzer Calibration
- Predicted Value Generation
- High Flow: 0 to 7 L/min
- Ventilator
- Cough/Deep Breathing
- Head
- Head and High Flow
- Head for Children
- Cardiac Output
- Compliance Check Function Ṙp, During Exercise
- Intermittent and Slow
- Serial and Parallel
- Predicted Value Generation
- Flow

Option:

- Optional

Generation Packages:

- Spirometry
- High Flow
- Spirometry/Flow-Volume
- Predicted Value Generator

Quality and Safety

- VASys HealthCare GmbH is certified according to ISO 13485
- Oxycon Pro® meets the requirements of European (Medical Devices Directive) and US (FDA) Law.
Cardiopulmonary Exercise Testing with Ease

A modern diagnostic system must be both technically convincing and tailored to today’s clinical needs of laboratory routine. To meet these demands Oxycon Pro was made quicker, more accurate and above all more economical than any piece of equipment ever designed for this field. Oxycon Pro is an expert system for routine CPET and offers you outstanding performance features and unparalleled ease of operation. So you can confidently give your attention to your patient and not to your equipment. The modular concept provides sufficient possibilities for upgrades or subsequent expansion whenever required or allowed by your budget.

Convincing in Every Way

■ Speed and Precision
To meet these high demands, Oxycon Pro uses sensors that exceed the common recommendations. The patented Triplet volume sensor is a precise volume sensor with low resistance and no flow limitations in the physiological range. Triplet guarantees precise measurements and is smaller and lighter than similar products, which means, it is more convenient for the patients who have to wear a mask or mouthpiece with the sensor during the test. Unlike other devices which require manual calibration, the volume sensor and gas analyzers are checked automatically, thus saving time and effort on the part of the operator.

■ Economy
In the time a standard stress ECG or pulmonary exercise test normally takes, Oxycon Pro allows you to run a complete, combined exercise test. A well-founded diagnosis can be made based on the analysis of all available stress test parameters at a glance. All Parameters at a Glance

A notable feature of the Oxycon Pro is the exceptional stability of the stress test sequence. This is particularly important if you want to expand your system later.

■ Operating Costs
Oxycon Pro needs no chemicals, expensive disposable sample tubes or disposable sensors. All that is required to run the system is a calibration gas and disposable ECG electrodes (if you choose not to use our optional lightweight gold suction electrodes).

■ Ease of Use
And, of course, ink and paper to print out your reports!

■ Components which perfectly fit to each other ensure trouble-free test sequences. This is particularly important if you want to expand your system later.

■ The new generation: YAPulse 150P

■ OPET unit with ECG screen and suction electrodes

Perfection in Simplicity

Our developers did their utmost to create a system that you could feel comfortable with right from the start. Because we have used a standard computer with keyboard and mouse and the proven Windows user interface, do not be surprised if Oxycon Pro seems familiar to you right from the start. Consequently, training time can be reduced to a minimum and you can delegate parts of the test to your team.