

METALYZER[®] 3B

PORTABLE SPIROERGOMETRY SYSTEM



Product Brochure



FOR A MORE ACTIVE LIFE



METALYZER[®] 3B

The METALYZER[®] 3B is a portable high resolution spiroergometry system with Breath-by-Breath technology. The system allows a complete medical analysis of the functionality of a person's lung, heart and metabolism at rest and under stress.

The METALYZER[®] 3B can be used in various ways thanks to its numerous hardware and software options. Its scope ranges from a spiroergometric measuring station for performance diagnostics up to a complete cardiopulmonary solution.

Either in a fitness club, at a medical practice, in a hospital or at an Olympic test center: Benefit from the METALYZER[®] 3B in combination with the efficient application software METASOFT[®] Studio and exploit the full potential of spiroergometry.

Information and Accuracy



SPIROERGOMETRY

LACTATE TEST

PWC

BORG



For more information: <http://cortex-medical.com>

Measuring at Various Locations

Due to its low weight and the compact measurements the METALYZER® 3B can be easily and flexibly taken from one measuring station to another. Thanks to the optionally available internal battery you do not have to turn off the device. You can operate the METALYZER® 3B even there is weak or no electricity supply at all. In addition, the system has a wireless connection to the PC and many other peripherals.

METALYZER® 3B

FOR A MORE ACTIVE LIFE

Features

- *portable Breath-by-Breath system*
- *internal battery allowing a 12-hour running time (available as an option)*
- *Bluetooth® LE for connection to HF, SpO2, power meters and other measuring devices*
- *interfaces to numerous types of ECGs*
- *USB or Bluetooth® connection to a PC*
- *front display with LED status indicators*
- *push-pull connectors protecting against reverse polarity and damages*
- *minimal need for maintenance*
- *long calibration intervals*
- *O2 sensor with long lifespan*
- *constant and dynamic flow control*
- *modular future-proof system set-up*

Low Maintenance

Our customers often say the METALYZER® 3B is a “work horse“. It is extremely reliable and requires only minimal adjustment and maintenance. Gas calibration once a month is absolutely sufficient. Handy gas cartridges and the automatic gas-on-demand valve ensure correct dosage of quantity and pressure.

Service-friendly

The few consumables can be easily and quickly exchanged by the user due to its clever design. The device is therefore operable at any time.

Volume Transducer	Hardware Options	Packages	Trolley & PC	Ergometer	HF/ECG	PhysioFlow/BD/SpO2	Software Options	Accessories & Spare Parts
<ul style="list-style-type: none"> CORTEX volume transducer disposable <ul style="list-style-type: none"> disposable turbines disposable flow electronics CORTEX volume transducer reusable <ul style="list-style-type: none"> turbine flow volume electronic 	<ul style="list-style-type: none"> battery option calibration kit <ul style="list-style-type: none"> gas-on-demand valve gas bottle 3 liter syringe box Canopy <ul style="list-style-type: none"> Canopy blanket hose adapter spirometry kit <ul style="list-style-type: none"> spirometry (SW) hand holder for CORTEX reusable flow sensor 100 disposable filters & nose clips 	<ul style="list-style-type: none"> performance package service package TestControlCenter <ul style="list-style-type: none"> for 2 CPET devices for 3 CPET devices for 4 CPET devices warranty extension 	<ul style="list-style-type: none"> CORTEX mobile Plus dual monitor <ul style="list-style-type: none"> printer shelf support arm CORTEX mobile Plus single monitor <ul style="list-style-type: none"> printer shelf support arm PC monitor laptop printer 	<ul style="list-style-type: none"> CORTEX bike M <ul style="list-style-type: none"> seat height adjustment (motor) integrated BP integrated SpO2 adjustable pedal cranks triathlon handle bar adaptation for pediatric ergometry CORTEX TM Sport <ul style="list-style-type: none"> fall stop handrail CORTEX TM High Performance <ul style="list-style-type: none"> fall stop handrail more <ul style="list-style-type: none"> Lode Cyclus II SRM Woodway HP Cosmos Monark Ergoline interfaces <ul style="list-style-type: none"> TrackMaster Micromed Marquette Quinton Motek Force TechnoGym ... 	<ul style="list-style-type: none"> Polar H10 BT smart HF sensor MSS 1-lead belt MSS 3-lead guard custo cardio 100 <ul style="list-style-type: none"> MC3000 interface custo cardio 200 <ul style="list-style-type: none"> MC3000 interface custo cardio 300 <ul style="list-style-type: none"> MC3000 interface ECG - electrodes custo med ECG - electrodes blue sensor 12-lead ECG interface <ul style="list-style-type: none"> Schiller GE Micromed AmedTec Dr. Schmitt Ergocid Spacelabs Norav Medset Labtech Welch Allyn 	<ul style="list-style-type: none"> PhysioFlow <ul style="list-style-type: none"> PhysioFlow license PhysioFlow electrodes PhysioFlow cable bag batteries charger PhysioFlow electrodes <ul style="list-style-type: none"> for 50 tests for 200 tests Tango M2 for use with custo med <ul style="list-style-type: none"> custo trigger cable QRS trigger software license Tango M2 with ECG module Nonin wrist Ox2 3150 	<ul style="list-style-type: none"> MSS Energy Metabolism for CPET MSS Performance Assessment <ul style="list-style-type: none"> MSS Exercise Scheduler MSS Pre-Operative Risk Assessment MSS Interpretation Assistant by Wasserman EOV Detection PhysioFlow License MSS Spirometry <ul style="list-style-type: none"> hand holder MC3000 Interface (custo med) 12-lead ECG Interface MSS Basal- & Resting Metabolic Rate MSS HL7 Interface Activation License MSS Network License Basic <ul style="list-style-type: none"> MSS Network License Extension 	<ul style="list-style-type: none"> face masks <ul style="list-style-type: none"> pediatric 1 pediatric 2 petite XS S M L head cap adapter for face mask sample line <ul style="list-style-type: none"> 2 m turbine with sieve - reusable turbine - disposable <ul style="list-style-type: none"> 100 pieces 500 pieces O2 sensor ML3B bacterial filter spirometry PhysioFlow electrodes <ul style="list-style-type: none"> for 50 tests for 200 tests ECG electrodes custo med ECG electrodes blue sensor

The Entire Spectrum of the METALYZER® 3B

Configure your METALYZER® 3B according to your individual needs. A wide range of hard-/software options and benefit packages are available. You can enhance your selected system by adding perfectly matching peripherals and accessories.

BENEFIT FROM OUR PACKAGES

The Service Package for Major Security of Investment

The service package includes all consumables (calibration gas, O2 sensors etc.) for the first three years. It gives you high planning reliability for your projects and test studies thanks to an extended warranty period of three years. In addition, your operating costs are much lower by purchasing the service package.

Performance Package METALYZER® 3B

The METALYZER® 3B performance package already comes with the most widely used hardware and software options in the area of sports and preventive medicine. In addition, the package includes a calibration set, a mask extension set and a larger stock of consumables.

CORTEX Warranty Extension

The warranty extension from CORTEX allows you to extend the warranty for your spiroergometry system at any time and as often as you wish. CORTEX offers you attractive warranty packages for the systems depending on scope and duration. The warranty includes free of charge repair of the device, trouble shooting of hard- and software as well as regular software updates.

For more information on the terms of the warranty extension please go to:



For more information: <http://cortex-medical.com>

CONNECTIVITY

CORTEX treadmill TM

The CORTEX treadmill TM combines functionality and design at an outstanding price-performance ratio. Two basic versions are available: with running surfaces of 53 cm x 161 cm or 73 cm x 172 cm plus various add-ons.

CORTEX bike M

Due to its ergonomic design with an open frame, low entry and the stable aluminum platform, the CORTEX bike M is a perfect all-rounder.

Additional Ergometers and Treadmills

Connect our systems to more than 40 different ergometers and treadmills. Based on special software interfaces you can easily connect our spiroergometry solutions to a continuously increasing number of bike / arm ergometers and treadmills (such as: Ergoline, Cyclus 2, h/p/cosmos, Woodway or Lode). Upon special request we also offer connections to additional devices. Just give us a call.

Electrocardiograms (ECGs)

The perfect symbiosis between spiroergometry and ECG: benefit from the specific advantages of a bidirectional interface and combine our spiroergometry solutions with the ECGs made by custo med.

Numerous advantages such as simplified operational steps, a synchronized cursor or an easier exchange of variables enable an especially intuitive reporting, thereby enhancing your test and diagnostic options.

Besides custo med's ECGs you can select alternative ECG connections. For more information please refer to pages 6 and 7.

Wireless 3-lead ECG from custo med

The custo guard allows a user-friendly 3-lead ECG measurement when performing laboratory and field tests.

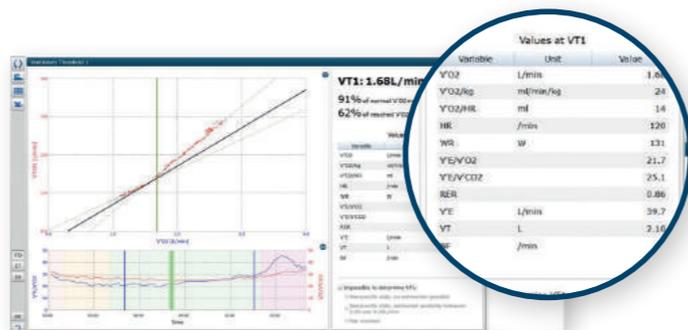
METASOFT® STUDIO MAKES COMPLEXITY EASY

The METASOFT® Studio combines the complexity of spiroergometric examinations with the most intuitive usability in a unique way.

It is impossible to give a feeling of the easy and intuitive data collection and test evaluation METASOFT® Studio offers. To put it briefly:

You have to see and test METASOFT® Studio by yourself.

Please contact us to arrange an appointment for a product presentation to see what the software is all about. To get a first impression, watch our short video tutorial:



CORTEX Quality Guarantee

The top quality of CORTEX products and services is the key factor of our success and represents a central brand promise. Since founding our company almost 30 years ago, we stay for:

„Fast realization of innovative ideas, supported by excellent services, now and in the future“.

We and all our CORTEX partners work according to the world wide quality and security standards of medical products.

The Entire Spiroergometry Variety

Visit our website www.cortex-medical.com and get to know the wide range of products offered. Or ask for additional brochures. Besides our powerful mobile and portable spiroergometry systems we also offer customized solutions. Share your ideas and tell us what you want!

You would like to know more about CORTEX and our products?

Then contact us!

Please call: +49 341 487 49-0 or send an e-mail to: sales@cortex-medical.com



METALYZER[®] 3B – TECHNICAL DATA

O2 Sensor

- type: chemical fuel cell
- range: 0-100 %
- accuracy: < 0.1 Vol %
- T90: < 100 ms
- calibration: 1x per month

CO2 Sensor

- type: NDIR
- range: 0-13 %
- accuracy: < 0.1 Vol %
- T90: < 100 ms
- calibration: 1x per month

Pressure Sensor

- range: 300-1,100 mbar

Volume Turbine, Reusable

- flow: ≤ 20,1 l/s
- accuracy: 50 ml or +/- 2 %
- resistance: ≤ 0,1 kPa/l/s @ 20 l/s
- calibration: 1x daily

Volume Turbine, Disposable

- flow: ≤ 14 l/s
- accuracy: +/- 3 %
- resistance: ≤ 0.06 kPa/l/s @ 14 l/s
- calibration: not necessary

Heart Rate

- smart BT | 3-lead ECG (optional)
12-lead ECG (optional)

Operating Conditions

- temperature: +10 ° to +35 °C
- ambient pressure: 500 to 1,050 mbar
- at atmospheres: ≤ 25 % O2
- relative humidity: 0 to 100 %
(non condensing)

Physical Specifications

- dimension (LxWxH): 235 x 165 x 85 mm
- weight: 940 g

Electrical Specifications

- PC interface: USB (cable or Bluetooth®)
- power supply:
input 100-250 VAC, 50-60 Hz, 12 W
- external battery: 12 h operating time

Quality Management

- EN ISO 9001, EN ISO 13485

Conformity

- guideline 93/42/EWG + 2007/47/EG
- EN ISO 60601-1; 60601-1-2;
10993-1; 15223-1; 1041; 62304; 62366;
23747; 26782

System Requirements Operating System

- Windows 7, 8, 10 (32 or 64 Bit)
Windows Server 2008, 2012 (64 Bit),
2016 (64 Bit)