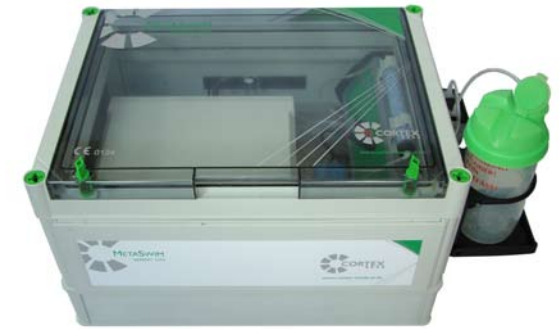


# METASWIM

## Unique solution of cardiopulmonary exercise testing for swimmers

Even in swimming sports, gas exchange analysis is an important instrument for the further improvement of sporting achievements. By using the METASWIM you can determine physiological exercise stress data which are directly relative to real competition stress. The METASWIM is prepared for mounting in flume: and also applicable with easy modification at the pool. CORTEX-Telemetry ensures a safety application because of a wireless communication.



### SCOPE OF DELIVERY

#### METASWIM

- METASWIM Base Device
- Triple V Volume Sensor incl. Wind Protector
- Gas Sample Line, mobile
- Mask
- Mask Harness
- MaxSport Carrying Set
- MetaSoft Software; Dongle
- Telemetry Receiver
- Earphone for Audio Output
- Batteries / Charging Unit
- Carrying Case
- Manuals on CD

### ACCESSORIES & OPTIONS

- Personal-Use Mask incl. Mask Harness
- Calibration Set
- Software Options
- CORTEX-mobile (System Cart)
- PC / Notebook
- Color Printer

### MEASURING METHOD / SENSORS

Measuring method	Breath-by-Breath
Flow / Volume	Type Turbine digital
	Range 0.05 - 20 L/s
	Resolution 7 mL
	Accuracy 2 %
O <sub>2</sub>	Type Electro-Chemical Cell
	Range 0 - 60 Vol. %
	T <sub>90</sub> Time <100 ms
	Accuracy 0.1 Vol. %
CO <sub>2</sub>	Type ND Infrared
	Range 0 - 13 % Vol.
	T <sub>90</sub> Time <100 ms
	Accuracy 0.1 Vol. %
Heart Rate	Polar HR Set by Hosand telemetry

### TELEMETRY

Type	Bidirectional 19200
Frequency	Baud
Range	433 - 434 MHz
Interface	1000 m
	RS232

### PHYSICAL SPECIFICATIONS

Dimensione (Lx-WxH)	2 x (120 x 110 x 45 mm)
Weight	570 g (without Battery)

### ELECTRICAL SPECIFICATIONS

PC Interface	Serial (RS232);
Power Supply	Battery
	Internal 7.2 V nominal;
	8800 mA

### OPERATING CONDITIONS

Warm-Up Time	approx. 30 min
Temperature	10° to max. +40° C
Ambient Pressure	500 - 1050 mbar
Relative Humidity	0 - 99 % (non-condensing)

### PRODUCT SAFETY

- Directive 93/42/EEC
- DIN EN 14971
- DIN EN 60601-1 / 60601-1-1 / 60601-1-2 / 60601-1-4
- CE 0124

### QUALITY MANAGEMENT

- Directive 93/42/EEC; Annex II; Section 3
- EN ISO 9001
- EN ISO 13485

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# MetaSoft®

the core of CORTEX Systems

No matter what you choose, either a CORTEX metabolic standalone device for performance testing or a complete system for cardiopulmonary differential diagnostics, CORTEX measurement technologies in combination with our practical and high-performance software solution MetaSoft® are convincing.



## SOFTWARE +

### MetaSoft®

- STATERA®
- CORTEX Interpretation Assistant
- CORTEX Cardiac Output
- CORTEX Spirometry
- CORTEX Energy Metabolism
- CORTEX Training Guidance
- CORTEX Exercise Scheduler
- Software for ECG Control
- Software for Workload Device Control
- Spiro 2000
- GDT Interface
- HL7 Interface

## MINIMAL REQUIREMENTS

### COMPUTER / NOTEBOOK

- Processor min. 2000 MHz
- Hard Disc Drive > 40 GB
- RAM min. 512 MB
- Disc Drive CD-ROM

### OPERATING SYSTEM

- MS-Windows XP (SP2)
- MS-Windows Vista (32 Bit)

### MONITOR

- 17" TFT
- min. 1024 x 768 Pixel

### INTERFACES

- LAN
- min. 2 x USB
- serial (COM)

### OPTIONAL

- Sound Card
- CD / DVD Writer

## SUPPORTED DEVICES

### CORTEX

- METAMAX II
- METAMAX 3X
- METAMAX 3B
- METALYZER 3B
- METALYZER II
- METASWIM

### BICYCLE ERGOMETERS

- custo ec 3000
- Cyclus
- Daum ergo-bike
- Elmed EGT
- ERGO FIT
- Ergoline Ergometrics / Ergo select
- ERM-100
- Fukuda
- Kettler
- Lode Corival / Examiner / Excalibur
- MIHA ProCycle
- Monark
- Proxomed
- Seca
- Technogym

### ARM ERGOMETER

- Lode Angio

### TREADMILL

- Cardioline
- Daum
- Fukuda
- HP Cosmos
- Jaeger
- JNB
- Lode Valiant
- Marquette
- Quinton
- TaeHa
- Trackmaster TM
- Woodway

### ECG-SYSTEMS

- Cardio Direct / Collect
- custo card / Metacontrol 3000
- Fukuda stress
- GE CASE (as of 3.14)
- ERGOCID
- CardioLab+
- Micromed Elite
- GE Healthcare (as of 6.5)
- ECG pro

### BLOOD PRESSURE DEVICES

- SunTech
- CBP 2000

### OXYGEN SATURATION DEVICES

- Nonin