

# MIR SECOND STATE OF S

Remote diagnosis via web also with Bluetooth® connection



included



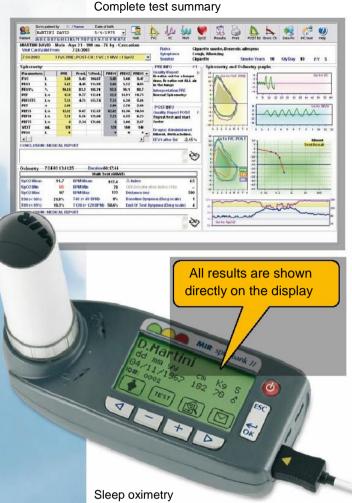
# spirobank®II

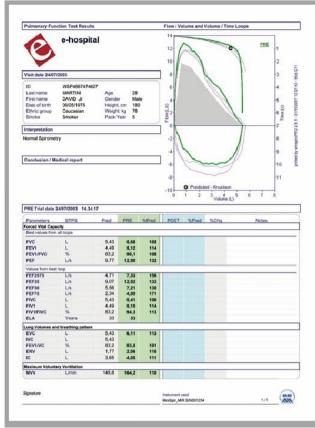
Defines what a Pulmonary Mini-Lab can do

#### Unique in the world. All in one

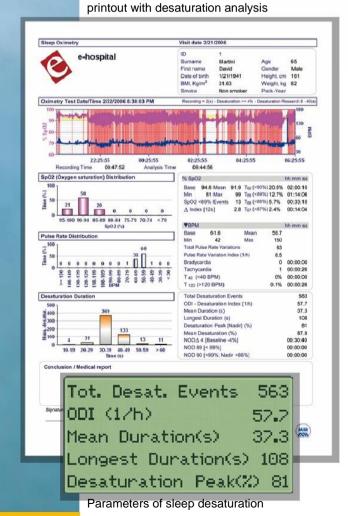
- Spirometer with 6,000 test memory
- · Oximeter with 1,000 hours of recording
- Stand alone or PC online operation
- · Patient identification by name or ID code
- USB, RS232, Bluetooth® and wireless acoustic modem

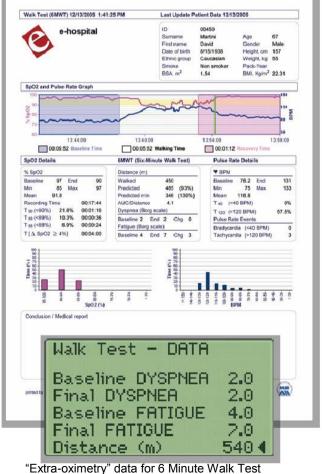






Three phase printout of 6 Minute Walk Test: Baseline, Walk, Recovery





# spirobank®I

Defines what a Pulmonary Mini-Lab can do



#### The most powerful, the most simple

#### Spirometry features

FVC, VC, IVC, MVV, PRE-POST BD Automatically records the best 3 trials Internal temperature sensor for automatic BTPS Advanced spirometry test interpretation Lung age estimation

#### SpO<sub>2</sub> Option

Sleep disorder detection with events recording Six minute walk test with acoustic warning for rest, walk and recovery Parameters directly shown on the display (min, max, mean SpO2 and Pulse Rate,  $\Delta$  Index, T90, T89, T88, T5, ODI, NOD, Desaturation Area etc.) Its innovative functions make it the most unique oximeter on the market



### FlowMir disposable turbine for single patient use

- High accuracy
- · Easy to replace
- Very low cost
- Designed for use with MIR spirometers
- · FlowMir is factory calibrated
- Available in box of 100 pieces
- No maintenance No filter No problem
- Hygiene 100% guaranteed by single packaging

## Reusable turbine for long term operation



- High accuracy
- Long term stability
- · Easy to clean or sanitized

MIR digital reusable and disposable turbines are developed in full compliance with ATS standards and guarantee accuracy in all environmental conditions



World's First International Patent Pending



#### Spirometry program

- Flow/Volume and Volume/time curves
- PRE-POST bronchodilator comparison
- FEV1 dose-response curve
- Exclusive pediatric incentive system
- Advanced spirometry test interpretation
- · Several sets of predicted values
- Integration with Electronic Medical Record
- · Data and graphs export also via e-mail

#### Oximetry program

- PC online with SpO2 and Pulse Rate trend
- Desaturation events analysis
- Possibility to modify the registered data (start/end walk test phase, artefacts, etc.)
- One of the most distinctive elements of the spirobankell is the "specialized and detailed" printout in color, which is easy to read and facilitates the diagnostic interpretation

#### spirobank®II base unit

#### Technical specifications

Temperature sensor: semiconductor (0-45°C) Flow sensor: bi-directional digital turbine

Volume range: 10 L Flow range: ± 16 L/s

Volume accuracy: ± 3% or 50 mL Flow accuracy: ± 5% or 200 mL/s

Dynamic resistance at 12 L/s: <0.5 cmH2O/L/s

Display type: graphic LCD - FSTN Display resolution: 128 x 64 pixel Keyboard: membrane, 6 Keys

Connectivity: USB, Bluetooth®, RS232, wireless internal modem (for Telemedicine

applications)

Power Supply: 4 x 1.5 V, AAA battery

Dimension: 2.4×5.7×1.2 inch (60×145×30 mm) Weight: 6.4 Oz (180 gram) with batteries

#### Measured parameters

FVC, FEV1, FEV1/FVC%, FEV3, FEV3/ FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, Lung Age, FIVC, FIV1, FIV1/FIVC%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV

#### SpO2 Option

#### Technical specifications

SpO2 range: 0-99%

SpO2 accuracy: ± 2% between 70-99% SpO2

Pulse Rate range: 30-254 BPM
Pulse Rate accuracy: ± 2 BPM or 2%

#### Measured parameters

Basic: SpO2 [Baseline, Min, Max, Mean],
Pulse Rate [Baseline, Min, Max, Mean], T90
[SpO2<90%], T89 [SpO2<89%], T88 [SpO2<88%],
T5 [ΔSpO2>5%], Δ Index [12s], SpO2 Events,
Pulse Rate Events [Bradycardia, Tachycardia]
6 Minute Walk Test: TΔ2 [SpO2≥2%],

TΔ4 [ΔSpO2≥4%], Recording time, Time [Rest, Walking, Recovery], Walked Distance,

Predicted Distance [Min, Standard],

Desaturation Area/Distance,

Borg Dyspnea [Baseline, End, Change], Borg Fatigue [Baseline, End, Change] Sleep Test: Desaturation Events, Desaturation

Index (ODI), Desaturation [Value, Duration, Nadir],  $\Box \Sigma \pi O2$  [Min Drop, Max Drop],

Pulse Variations, Pulse Rate Index, NOD 89 [SpO2<89%; >5 min],

NOD 4 [SpO2 Baseline-4%; >5 min], NOD 90 [SpO2<90%; Nadir <86%; >5 min]

#### Available options

- PC Software winspiroPRO NET (Network)
- Adult reusable SpO2 finger probe
- Adult disposable SpO2 finger probe
- Pediatric reusable SpO2 finger probe
- Infant disposable SpO2 probe
- Neonatal disposable SpO2 probe
- Ear clip SpO2 probe
- SpO2 finger probe extension cable

#### Standard price includes

- spirobank®II base unit
- USB cable
- Carrying case
- Plastic noseclip
- 4 AAA alkaline batteries
- winspiroPRO software CD



### **CARDIOV**MEDS

143 King Street, Kingston.

Phone: 1876-948-4860 / 1876-423-1726

cardiovmeds@yahoo.com www.cardiovmeds.com