

**Spirodoc®**

**The first 3D Oximeter®**

**Two functional modes: doctor and Home-Care**



**reddot** design award  
winner 2010 – 2011

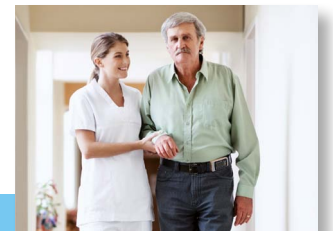
## Smart Oximeter with all results on-screen



**Touch Screen display**  
for immediate  
and intuitive use

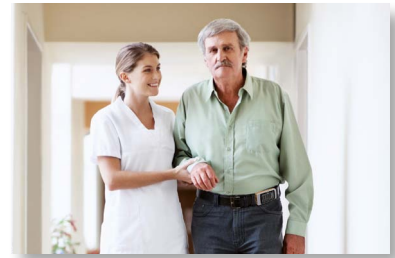


**Automatic ON/OFF**  
simple programmable  
ON/OFF timer



**3D Accelerometer**  
with motion analysis  
for O<sub>2</sub> prescription

# Spirodoc®



Spirodoc® is the first **3D Oximeter®** incorporating a triaxial motion sensor to correlate the saturation level (%SpO2) with physical activity (walk counter, movement analysis and VMU).

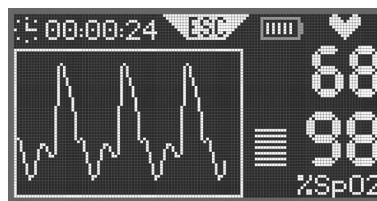
## 3D accelerometer with motion analysis

### 6MWT with new O<sub>2</sub> Gap Index (MIR patent pending)

Simple, clear SpO2 and Pulse Rate measurements with the plethysmographic curve.

During the single six-minute walk test (6MWT), Spirodoc® estimates the level of oxygen therapy required by the patient.

Innovative and essential in pneumology, cardiology and rehabilitation etc.



Plethysmographic Curve



Oximetry Menu



Patient Data Entry

### Day and night



Spirodoc® carries out sleep desaturation studies and memorizes events as well as body position.



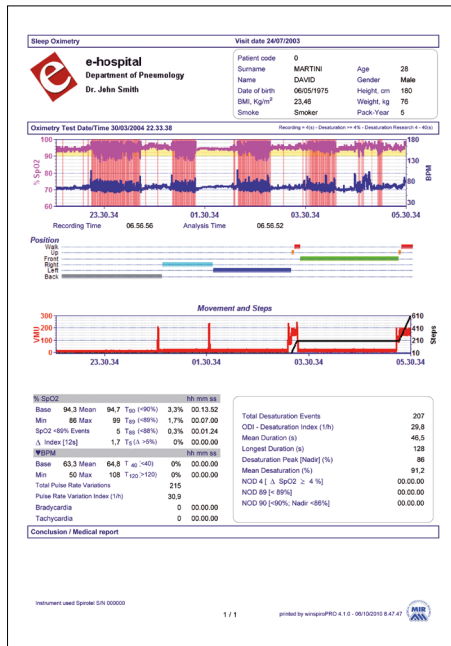
Parameter Choice

# WinspiroPRO now available with HL7 interface

MIR PC software  
for maximum  
oximetry performances

All results can be quickly  
printed.

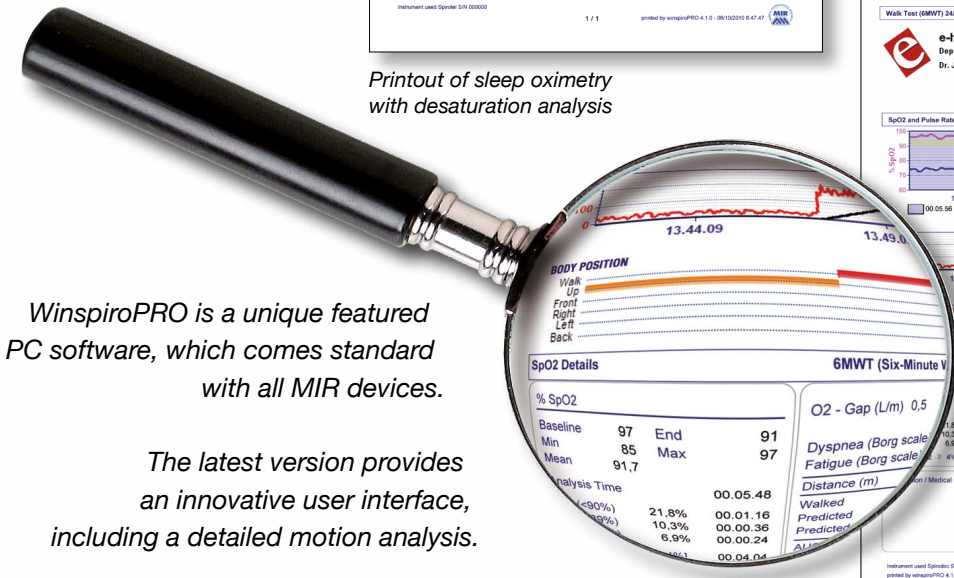
All tests memorised in  
Spirodoc® are automatically  
downloaded into winspiroPRO  
and a patient data card is  
automatically created.



Printout of sleep oximetry  
with desaturation analysis

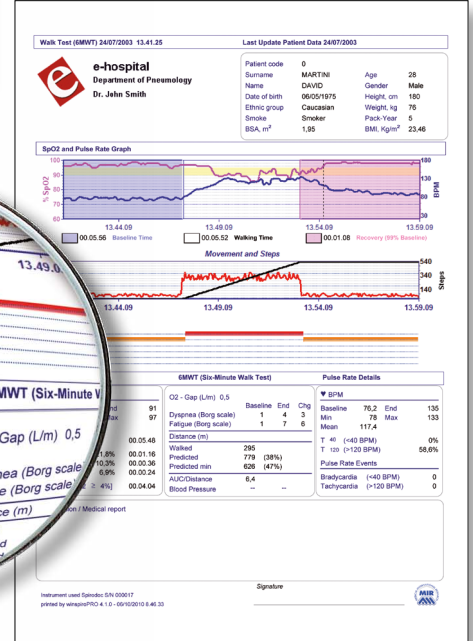
WinspiroPRO can easily be  
connected to a database, EPR,  
hospital or occupational health  
system.

Special edition with HL7  
interface is available on  
request.

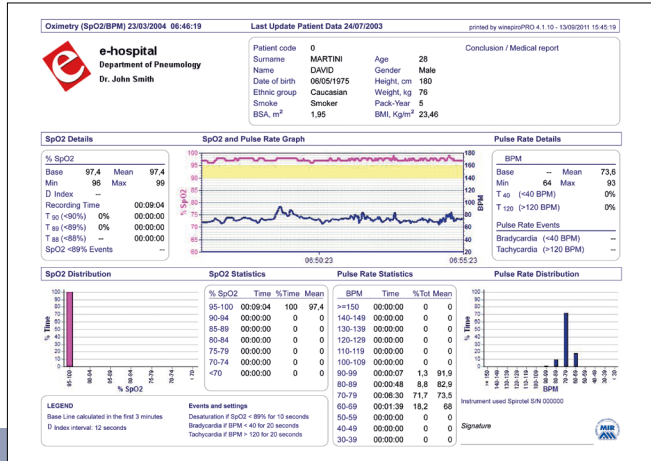


WinspiroPRO is a unique featured  
PC software, which comes standard  
with all MIR devices.

The latest version provides  
an innovative user interface,  
including a detailed motion analysis.



Printout of the 6 minute walking test:  
baseline, walk, recovery



Printout with events analysis

## Comprehensive patient records

All patient physical activity records, as well as body position, are shown on simple, single-screen patient cards with dynamic management of all data and graphs including SpO2 measurements during the corresponding test (6MWT, Sleep, Stress Test...).

# Spirodoc®

## Sensors and accessories available on request



Belt with silicon holder



Bluetooth® connectivity



Paediatric and adult finger probe



Neonatal flex probe

## Central unit technical specifications

Display: LCD Backlit Touch screen Display:  
Resolution: 128x64 pixels  
Power supply: Lithium ion 3.7V, 1100mA rechargeable battery with 30 hours measurement back-up  
Data transmission: USB 2.0 (Bluetooth® optional)  
Accelerometer: Triaxial  $\pm 2g$ , 400Hz sampling  
Dimensions and weight: central unit 101x48x16mm, 99g  
Battery charger (optional): 100VAC - 240VAC, 50Hz-60Hz output 5VDC, 500mA, micro USB type B

## Oximeter technical specifications

SpO<sub>2</sub> range: 0-100%  
SpO<sub>2</sub> accuracy:  $\pm 2\%$  (50-100% SpO<sub>2</sub>)  
Pulse rate range: 20-254BPM  
Heart rate accuracy:  $\pm 2$ BPM or 2%, whichever is greater

## Oximeter measured parameters (standard)

SpO<sub>2</sub> [Baseline, Min, Max, Mean], Pulse rate [Baseline, Min, Max, Mean], T90% [SpO<sub>2</sub><90%], T89% [SpO<sub>2</sub><89%], T88% [SpO<sub>2</sub><88%], T5% [ $\Delta$ SpO<sub>2</sub>>5%],  $\Delta$ Index [12s], SpO<sub>2</sub> Events, Pulse rate events [Bradycardia, Tachycardia], Step counter, Movement [VMU], Recording time, Analysis time

## Sleep analysis (specific parameters)

Body position, SpO<sub>2</sub> Events, Desaturation index (ODI), Desaturation [Mean Value, Mean duration, Longest duration, Nadir Peak],  $\Delta$ SpO<sub>2</sub> [Min Drop, Max Drop], Total Pulse Variations, Pulse Rate Index, NOD89% [SpO<sub>2</sub><89%; >5min], NOD4% [SpO<sub>2</sub> Basale-4%; >5min], NOD90% [SpO<sub>2</sub><90%; Nadir<86%; >5min]

## 6MWT (6 Minute Walk Test specific parameters)

O<sub>2</sub>-Gap, Estimated distance, Distance walked, Predicted distance [Min, Standard], T $\Delta$ 2% [SpO<sub>2</sub> $\geq$ 2%], T $\Delta$ 4% [ $\Delta$ SpO<sub>2</sub> $\geq$ 4%], Time [Rest, Walking, Recovery], Desaturation Area/Distance

**Optional data entry:** Borg Dyspnea [Baseline, End, Change], Borg Fatigue [Baseline, End, Change], Arterial blood pressure [Systolic, Diastolic], Oxygen administered

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