

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 O₂ 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).

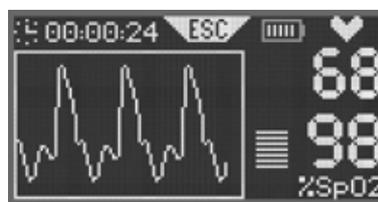
3D accelerometer with motion analysis

6MWT with new O₂ 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.



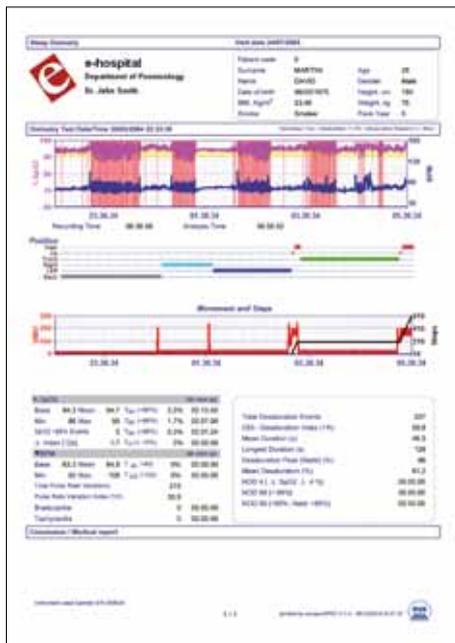
Parameter Choice

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



Spirometry detachable transducer can be attached or removed from the oximeter



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

SpO2 range: 0-100%
SpO2 accuracy: $\pm 2\%$ (50-100% SpO2)
Pulse rate range: 20-254BPM
Heart rate accuracy: ± 2 BPM or 2%, whichever is greater

Oximeter measured parameters (standard)

SpO2 [Baseline, Min, Max, Mean], Pulse rate [Baseline, Min, Max, Mean], T90% [SpO2<90%], T89% [SpO2<89%], T88% [SpO2<88%], T5% [Δ SpO2>5%], Δ Index [12s], SpO2 Events, Pulse rate events [Bradycardia, Tachycardia], Step counter, Movement [VMU], Recording time, Analysis time

Sleep analysis (specific parameters)

Body position, SpO2 Events, Desaturation index (ODI), Desaturation [Mean Value, Mean duration, Longest duration, Nadir Peak], Δ SpO2 [Min Drop, Max Drop], Total Pulse Variations, Pulse Rate Index, NOD89% [SpO2<89%; >5min], NOD4% [SpO2 Basale-4%; >5min], NOD90% [SpO2<90%; Nadir<86%; >5min]

6MWT (6 Minute Walk Test specific parameters)

O₂-Gap, Estimated distance, Distance walked, Predicted distance [Min, Standard], T Δ 2% [SpO2 \geq 2%], T Δ 4% [Δ SpO2 \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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