



# spirotel<sup>®</sup>

Telespirometry + Oximetry in a single pocket device

New

## Asthma and COPD patient Telemonitoring via WEB

Spot and overnight SpO<sub>2</sub> and HR measurements  
Sleep apnea desaturation recording  
Also ideal for screening in the doctor's office

## Patient tests easily transmitted via telephone

Without modem, without wires, without problems  
Doctor secure access to the patient results via Internet  
Easy data analysis with comprehensive graphic presentations

World's First  
Telemedicine  
"mini-lab"  
for Home Care



Quality Spirometry

CE

0476

FDA

Approved

ATS

Standard

ISO

9001-2000

ISO

13485



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3 data receiving systems available

- via Internet
- via PC-modem
- via RS232 cable

#### spirotel records:

- Spirometry: FVC, FEV1, FEV1%, PEF, FEF 25-75, FET, Flow/Volume loop and Volume/time curve
- Oximetry: %SpO2 and Heart Rate for spot and overnight recording (every 4 sec)
- Respiratory symptoms based on programmable questions

#### spirotel offers:

- COPD monitoring, sleep apnea screening, desaturation analysis
- Up to 24 hours SpO2 and HR recording
- Digital turbine for accurate measurements without calibration
- Large memory capacity for spirometry and oximetry tests
- Internal software upgradeable via WEB

#### User friendly

- Switch ON/OFF, spirometry, oximetry and data transmission keys
- Spirometry test quality control
- Automatic test interpretation by traffic light
- Programmable warnings for SpO2 and Heart Rate levels
- Ideal for adult and pediatric monitoring

#### Easy wireless data transmission

- **spirotel** is a pocket-sized device designed for patient use
- The test results are transmitted simply by making a call, placing the phone handset near to **spirotel** and pressing the key with the phone icon



## Telemedicine



**PATIENT**

#### spirotel

towards the "virtual clinic" with major benefits both for patient and for health system

- Automatic data receiving by dedicated WEB server
- Test records accessible by the doctor via Internet
- Easy yet advanced PC software, for comprehensive data analysis
- Patient risk highlight by traffic light "flag" (green, yellow, red)
- Email or SMS message to the doctor to advise of data reception

The easiest and most effective way to monitor and to prevent any exacerbation of the patient



## WinspiroPRO PC Software

- Spirometry parameters, curves and symptoms trends for an ideal evaluation of patient's follow-up
- Sleep apnea detection and "walking test" recording with %SpO2 and Heart Rate profile
- Statistic analysis to assess desaturation events
- Data and graphs export also by email
- Can be integrated into other management systems

# made simple

## GP DOCTOR



## WEB SERVER



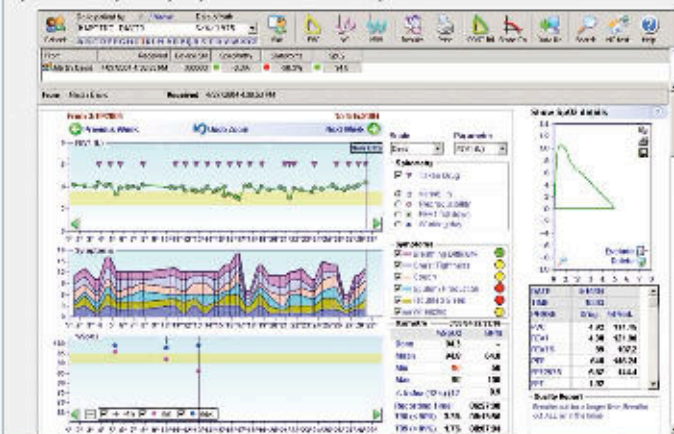
## SPECIALIST

Perfect for clinical trials  
teleconsulting and e-Health Care  
Usable in remote locations and  
in extreme conditions



Option:  
the test results can  
be transmitted directly  
to the doctor's mobile phone via MMS

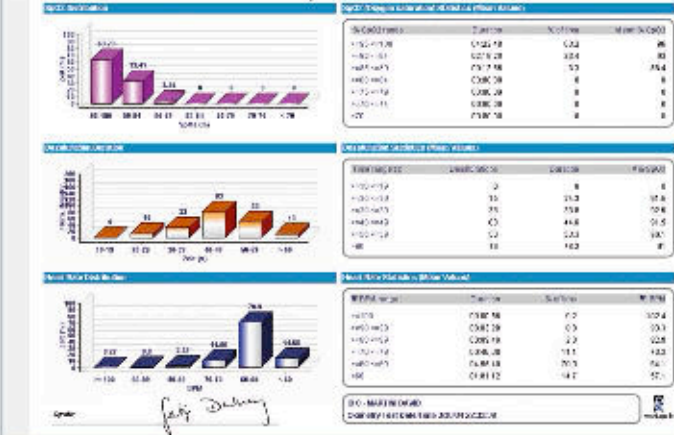
### Spirometry + symptoms + oximetry trend



### Sleep apnea recording

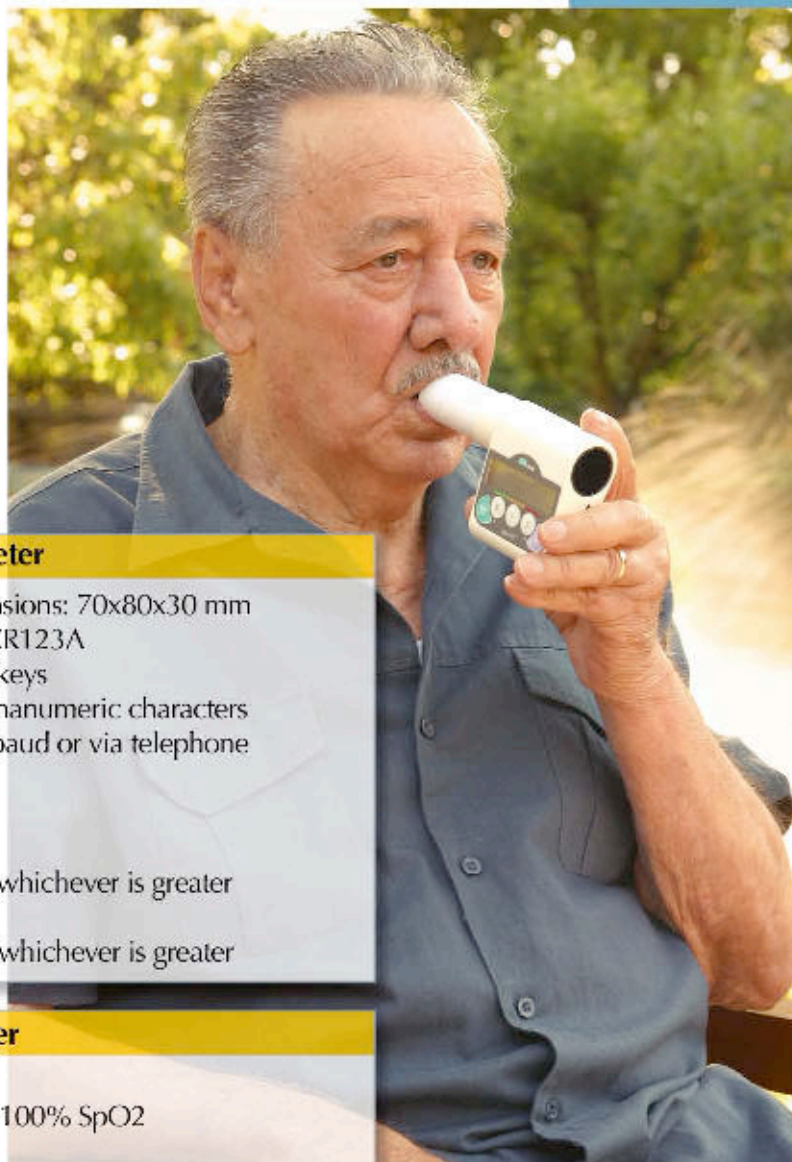


### Desaturation statistical analysis



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www.spirometry.com

### Technical Specifications spirometer

Weight: 100 g with battery - Dimensions: 70x80x30 mm  
Power supply: 3V Lithium battery CR123A  
Keyboard: Membrane keyboard, 5 keys  
Display: STN LCD, 2 lines x 16 alphanumeric characters  
Data transmission: RS232 at 9600 baud or via telephone  
Flow sensor: Digital Turbine  
Test duration: Maximum 60 s  
Flow range:  $\pm 16$  L/s  
Flow accuracy:  $\pm 5\%$  or 200 mL/s, whichever is greater  
Max volume: 10 L  
Volume accuracy:  $\pm 3\%$  or 50 mL, whichever is greater

### Technical Specifications oximeter

SpO2 range: 0-99%  
SpO2 accuracy :  $\pm 2\%$  between 70-100% SpO2  
HR range: 30-254 BPM  
HR accuracy:  $\pm 2$  BPM or 2%, whichever is greater

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