SPIRODOC™

Handheld, Stand-alone and PC-based Spirometer

Touchscreen Spirometer and 3D Oximeter: 6MWT, Sleep Test, 24h SpO2 Holter.

Two International Patents: Design Copywrite and Multifunctional capabilities.
**MAIN features**

**REAL-TIME TEST**
- **Spirometry:** FVC, VC, MVV, PRE/POST Bronchodilator comparison
- **3D Oximetry** (optional): Spot test (SpO2, Pulse), 6MWT, Sleep Test, 24h SpO2 Holter Test.

**CARRY EVERYWHERE**
- LCD Touchscreen Display, long battery life, large internal storage, carrying case included

**COMPLIANCE ATS/ERS 2019**
- And other Standards including ISO 26782 (for Spirometry), ISO 23747 (for PEF), ISO 80601-2-61 (for Oximetry), and more.

**PC CONNECTION AVAILABLE**
- Real-time test on PC screen, connect with your EHR/EMR, back-up internal memory and more, via USB and Bluetooth

**DISTINCTIVE features**

**PREDICTED SETS & VALUES**
- Large Selection, including comparison %Pred, Z-score and LLN. Include GLI in PC-mode

**6MWT, SLEEP TESTS, HOLTER**
- With Oximetry option, measure desaturation events during exercise, sleep and daily activities

**EHR/EMR CONNECTIVITY**
- Via PC, integration with patient database on your EHR/EMR (in HL7, GDT)

**COVID-19 PREVENTION**
- Complete Disposable Set with Antiviral filter. Bluetooth connection to test at safety distance

**Always INCLUDED**
- Carrying case
- USB cable
- Noseclip
- PC Software license
- With Oximetry Option:
  - Finger Probe
  - Plastic hard case and belt
Compatible **SOFTWARE**

**winspiroPRO**
- Pediatric Incentive (PATENTED) to improve patient compliance during the test.
- Acceptability Messages, Test interpretation and Quality Control Grade according to the latest Spirometry Standards.

**MAIN FEATURES**
- Windows-based solution for Spirometry, Oximetry and Telemedicine.
- Wide range of predicted sets and values, including GLI Predicted sets, LLN and Z-score.
- Embedded EHR/EMR connectivity.
- **NET VERSION** available, share one database between different PC workstations.

**MEDICAL REPORT**
- Specialized and customizable printout

**spiro Connect**
- Windows-based solution, **direct integration** with your EHR/EMR.
- Real time test include Spirometry and Oximetry.
- Standardized communication in HL7 or Exchange Protocol.

**MAIN FEATURES**
- Select patient info directly from your own EHR/EMR.
- **Spirometry test:** FVC-Pre, FVC-Post, VC-Pre
- **Oximetry Test:** SpO2 (%), Pulse (BPM)

**GO-TO-MARKET TOOLKIT**
- Software Development Kit available for System Integrators and App Developers.
- OEM service available for Spirometry and Oximetry.

**Compatible **TURBINES**

**flowMIR™ Disposable Turbine**
- Mouthpiece: Included Disposable
- Turbine Disinfection: Not required
- Turbine Calibration: Not required
- Packaging: Individually sealed: 60 or 10 units / box
- Antiviral Filter: Available Disposable

**Reusable Turbine**
- Mouthpiece: Required Not Included
- Turbine Disinfection: Required
- Turbine Calibration: Required
- Packaging: 1 unit in Carton box
- Antiviral Filter: Required Disposable

**PLAY VIDEO** **SCIENTIFIC PUBLICATIONS**
Spirometry
Flow sensor
bi-directional digital turbine
Flow range
±161 L/s
Volume accuracy
±2.5% or 50 mL
Flow accuracy
±5% or 200 mL/s
Dynamic resistance
<0.5 cmH2O·L/s
Temperature sensor
semiconductor (0-45°C)
Measured parameters
FVC, FEV1, FEV1/FVC%, PEF, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, FEI25, FEI50, FEI75, FEI2575, FET, Evol, ELC, FIVC, FIV1, FIV1/FIVC%, PIF, VCV, IVG, IC, ERV, FEV1/VC%, TV, VE, RR, t1, t2, t1/4, t1/2, MMV
Memory capacity
Up to 10000 tests

Oximetry (on request)
Measurement method
Red and infrared absorption
SpO2 range
0-99%
SpO2 accuracy
±2% between 70-99% SpO2
Average number of heart beats for the %SpO2 calculation
8 beats
Pulse Rate range
30-254 BPM
Pulse Rate accuracy
±2 BPM or 2%
Average interval for the calculation of cardiac pulse
8 seconds
Signal quality indication
0 - 8 segments on display
Measured parameters

All test
%SpO2MIN, %SpO2MAX, %SpO2MAX, BPM MIN, BPM MAX, Tidal, TPeak, T<99%, T<89%, T<88%, T<87%, E%SpO2<99, A%SpO2<99, B<40BPM, F<40BPM, E<120BPM
Sleep test
%SpO2MIN, BPM, ODI, Mean Dur, Desat, TotDesat, Longest Desat, Desat. Peak, BPM Index, Mean Desaturat, Mean Max, Drop, BPM Variation, NOD4%, NOD9%, NOD90%, tNOD4%, tNOD9%, tNOD90%
6MWT test
%SpO2, BPM, Thasline, Twalking, Trecyoev, Distance, T<0%SP2, T<4%SP2, Predicted, %Predicted, AUC/Distance, Dyspnea, Dyspnea, Fatigue, Diastolic, Systolic, Steps, V6, 02-GAP, 02
Memory capacity
up to 300 hours oximetry

Certificates & Registrations
CE 0476
MED 9826
FDA 510 (k)
K 10530
Health Canada
71191 (class II), 75535 (class III)
CND code
Z12150102 (spiro)
Z120302408 (spiro + oxy)
GMDN code
46096 (spiro), 45607 (spiro + oxy)
Ministry of Health
499398/R (910600), 501050/R (910600), 501619/R (910610)
1271090/R (9106001)
1271086/R (910606)
1271078/R (910611)

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