

ADVANCED

SPIROLABTM

Desktop, Stand-alone and
PC-based Spirometer,
with Oximetry Option

All-in-one Spirometer with 7" display,
Embedded Printer and Oximetry option,
to carry on the go



MAIN features



REAL-TIME TEST

Spirometry: FVC, VC, IVC, MVV, PRE/POST
Bronchodilator comparison
Oximetry (optional): Spot test (SpO2%, Pulse BPM)



CARRY EVERYWHERE

7" LCD Color Touchscreen Display, Long-lasting rechargeable battery, massive Internal Storage



COMPLIANCE ATS/ERS 2019

And other Standards including ISO 26782 (for Spirometry), ISO 23747 (for PEF), ISO 80601-2-61 (for Oximetry), and more. CE0476, FDA 510 (k)



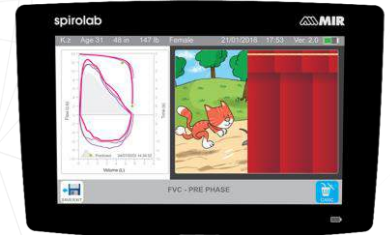
PC CONNECTION AVAILABLE

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



CALIBRATION SOFTWARE

Available on device, with printable calibration report (no separate software required)



DISTINCTIVE features



PREDICTED SETS & VALUES

Large Selection, including GLI, comparison %Pred, Z-score and LLN



PRINTED EMBEDDED

Thermal printer. Paper size 112mm. Direct external print also available via PC software



PEDIATRIC INCENTIVE

Real-time animation on display to improve patient compliance during the test



COVID-19 PREVENTION

Complete Disposable Set with Antiviral filter. Bluetooth connection to test at safety distance

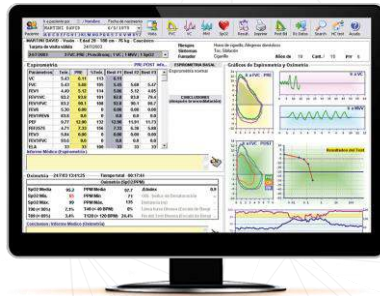
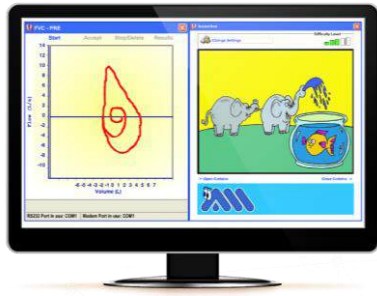
Always INCLUDED

- ✎ Carrying case
- ✎ Power supply/battery charger
- ✎ USB cable
- ✎ 1 Roll of thermal printer paper
- ✎ Noseclip
- ✎ PC Software license
- With Oximetry Option:
 - ✎ Finger Probe



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.

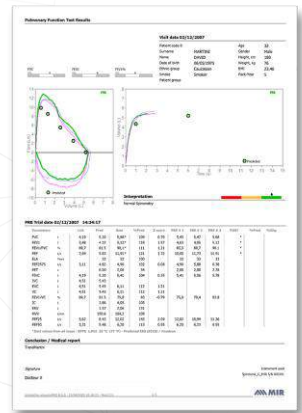
Wide range of predicted sets and values, including GLI Predicted sets, LLN and Z-score.

Embedded EHR/EMR connectivity.

NET VERSION available, share one database between different PC workstations.

MEDICAL REPORT

Specialized and customizable printout



spiro Connect



MAIN FEATURES

Windows-based solution, direct integration with your EHR/EMR.

Real time test include Spirometry and Oximetry
Standardized communication in HL7 or Exchange Protocol.

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.



Learn more about available SDK and OEM



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



Required, Not Included

Required

Required

1 unit in Carton box

Required Disposable

PLAY VIDEO



SCIENTIFIC PUBLICATIONS



TECHNICAL datasheet

PRODUCT CODES - Spirolab Configurations

911080EO – Spirometer • 911080E1 - Spirometer with reusable turbine

911081EO - Spirometer + Oximeter • 911081E1 - Spirometer + Oximeter with reusable turbine

Technical specification

Width 220 mm
 Length 210 mm
 Thickness 51 mm
 Weight 1450 g (battery pack included)

Sensors



miniflowmeter (code 900595)
 for reusable and disposable turbine
 dimension (Ø 30 mm, 42 mm)

Reusable soft, adult, MIR sensor for
 oximetry tests (code 919024) only
 spirolab code 911081

Power supply Rechargeable battery and mains
 power
 Current capacity Ni-MH, 6 elements
 4500 mAh
 Consumption average 250 mA
 Backup battery voltage none
 Batteries charger Output voltage=12 V, current=1A,
 compliant with EN 60601-1

Autonomy ~10 hours
 Connectivity USB 2.0, Bluetooth® 2.1
 Display 7 inch colour touch screen LCD
 Display with 800x480 resolution
 Keyboard absent, touchscreen
 Mouthpieces Ø 30 mm (1.18 inch)
 Type of electrical Internally powered
 Protection Class II while charging battery
 Safety level for shock hazard Type BF Apparatus
 Conditions of use Apparatus for continuous use

Storage conditions Temperature: MIN -40 °C,
 MAX +70 °C
 Humidity: MIN 10% RH;
 MAX 95%RH

Transport conditions Temperature: MIN -40 °C,
 MAX +70 °C
 Humidity: MIN 10% RH;
 MAX 95%RH

Operating conditions Temperature: MIN + 10 °C,
 MAX + 40 °C
 Humidity: MIN 10% RH,
 MAX 95%RH

Applied norms Electrical Safety EN 60601-1
 Electro Magnetic Compatibility
 EN 60601-1-2

Degree of protection IPX1 appliance protected against
 against water penetration water leaks

Codes and equipments

911080EO spiro
 911080E1 spiro with reusable turbine
 911080E2 spiro with 120 FlowMir
 911081EO spiro+oxy
 911081E1 spiro+oxy with reusable turbine
 911081E2 spiro+oxy with 120 FlowMir

Spirometry

Flow sensor bi-directional digital turbine
 Volume rate 10 L
 Flow range ±16L/s
 Volume accuracy ±2.5% or 50 mL
 Flow accuracy ±5% or 200 mL/s
 Dynamic resistance <0.5 cm H2O/L/s
 Temperature sensor semiconductor (0-45°C)
 Test available FVC, VC, IVC, MVV, PRE-POST
 Measured parameters FVC, FEV1, FEV1/FVC%, FEV1/PEF,
 FEV1/VC, FEV1/FEF0.5, DTPEF, FEV
 FEV0.5/FVC, FEV0.75, FEV0.75/FVC,
 FEV2, FEV2/FVC, FEV3, FEV3/FVC,
 FEV1/FEV6, PEF, FEF25, FEF50,
 FEF2575, FEF7585, FET, Vext, ELA,
 FIVC, FIV1, PIF, FIV1/FIVC, FIF25,
 FIF75, R50, MVVcal, PIF, IRV, VC,
 IVC, IC, ERV, IRV, FEV1/VC, TV, VE,
 te, ti/t-tot, TV/ti, MVV
 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 8 beats
 heart beats for the
 %SpO2 calculation
 Pulse Rate range 18-300 BPM
 Pulse Rate accuracy ± 2BPM or 2% whichever is greater
 Average interval for 8 seconds
 the calculation of
 cardiac pulse
 Signal quality indication 0 - 8 segments on display
 Test available spot
 Measured parameters SpO2% min, max, average
 BPM min, max, average
 Test duration
 % Bradycardia Duration (<40 BPM)
 % Tachycardia Duration (>120 BPM)
 % of Time with SpO2 ≤ 90% (T90%,
 T89%), T5
 Memory capacity about 500 hours oximetry

Certificates & Registrations

CE 0476 MED 9826
 FDA 510 (k) K 052140
 Health Canada 71191 (class II)
 GMDN code Z12150102 (spiro)
 Ministry of Health Z1203020408 (spiro + oxy)
 46906 (spiro), 45607 (spiro + oxy)
 1272475/R (spiro)
 1272476/R (spiro + oxy)
 1645455/R (spiro)

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