

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)



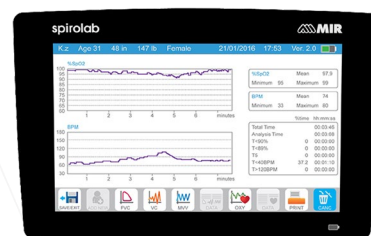
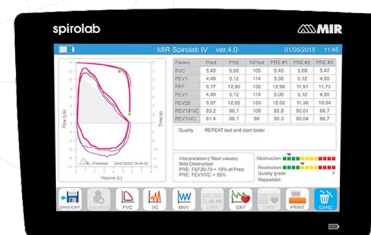
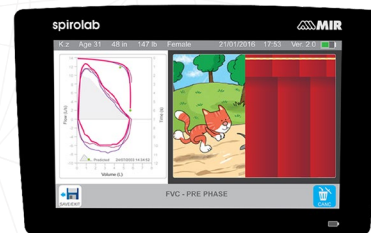
PC CONNECTION AVAILABLE

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

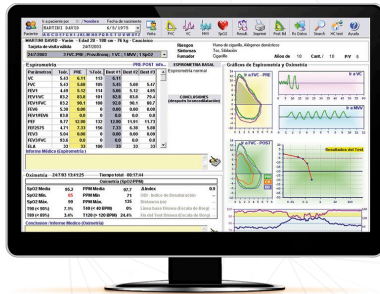
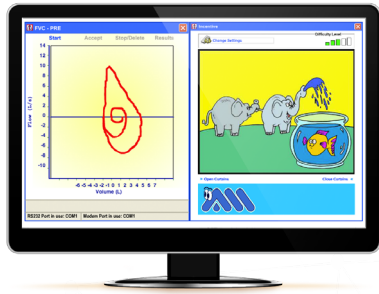
Always INCLUDED

- ✎ 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.

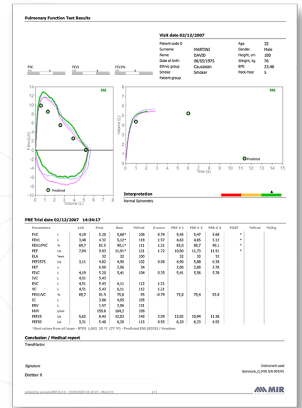
Wide range of predicted sets and values, including **GLI Predicted sets, LLN and Z-score.**

Embedded **EHR/EMR connectivity.**

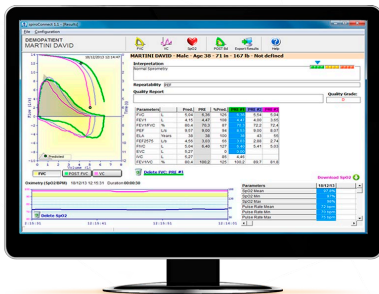
NET VERSION available, share one database between different PC workstations.

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



Reusable Turbine



Mouthpiece

Included Disposable

Required, Not Included

Turbine Disinfection

Not required

Required

Turbine Calibration

Not required

Required

Packaging

Individually sealed: 60 or 10 units / box

1 unit in Carton box

Antiviral Filter

Available Disposable

Required Disposable

PLAY VIDEO



SCIENTIFIC PUBLICATIONS



TECHNICAL datasheet

PRODUCT CODES - Spirolab Configurations

911080E0 – Spirometer • 911080E1 - Spirometer with reusable turbine

911081E0 - 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 (∅ 30 mm, 42 mm)

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

Power supply

power

Current capacity

Consumption

Backup battery voltage

Batteries charger

Rechargeable battery and mains

Ni-MH, 6 elements

4500 mAh

average 250 mA

none

Output voltage=12 V, current=1A,
compliant with EN 60601-1

~10 hours

Autonomy

Connectivity

Display

Display

Keyboard

Mouthpieces

Type of electrical

Protection

Safety level for shock hazard

Conditions of use

USB 2.0, Bluetooth® 2.1

7 inch colour touch screen LCD

with 800x480 resolution

absent, touchscreen

∅ 30 mm (1.18 inch)

Internally powered

Class II while charging battery

Type BF Apparatus

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

against water penetration

IPX1 appliance protected against
water leaks

Codes and equipments

911080E0	spiro
911080E1	spiro with reusable turbine
911080E2	spiro with 120 FlowMir
911081E0	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 H ₂ O/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
	Up to 10000 tests
	0.5,
	FEV6, FEF75, EVOL, FIF50, EVC, RR, ti,
Memory capacity	

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	18-300 BPM
Pulse Rate accuracy	± 2BPM or 2% whichever is greater
Average interval for the calculation of cardiac pulse	8 seconds
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)
CND code	Z12150102 (spiro) Z1203020408 (spiro + oxy)
GMDN code	46906 (spiro), 45607 (spiro + oxy)
Ministry of Health	1272475/R (spiro) 1272476/R (spiro + oxy) 1645455/R (spiro)

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