

SPIROLAB™

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)



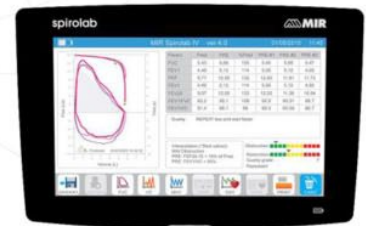
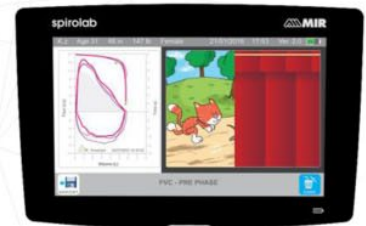
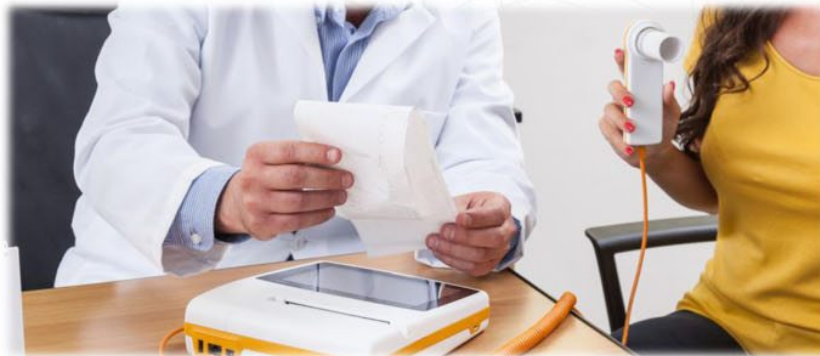
PC CONNECTION AVAILABLE

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

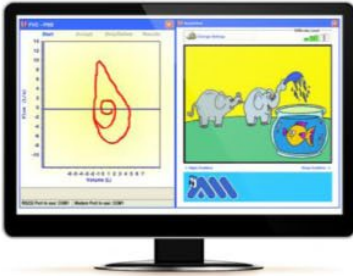
Always INCLUDED

- ✎ 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.

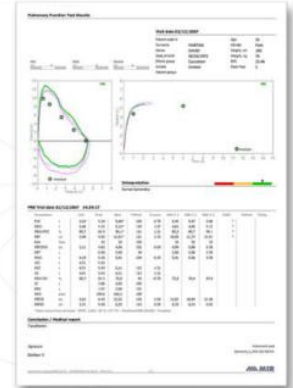
Wide range of predicted sets and values, including GLI Predicted sets, LLN and Z-score.

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

TECHNICAL datasheet

PRODUCT CODES- Spirolab Configurations

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

911081E0 - Spirometer + Oximeter • 911081E1 - Spirometer + Oximeter with reusable turbine

Technical specification		Spirometry	
Width	220 mm	Flow sensor	bi-directional digital turbine
Length	210 mm	Volume rate	10 L
Thickness	51 mm	Flow range	±16L/s
Weight	1450 g (battery pack included)	Volume accuracy	±2.5% or 50 mL
Sensors		Flow accuracy	±5% or 200 mL/s
	miniflowmeter (code 900595) for reusable and disposable turbine dimension (Ø 30 mm, 42 mm)	Dynamic resistance	<0.5 cm H ₂ O/L/s
	Reusable soft, adult, MIR sensor for oximetry tests (code 919024) only spirolab code 911081	Temperature sensor	semiconductor (0-45°C)
Power supply	Rechargeable battery and mains	Test available	FVC, VC, IVC, MVV, PRE-POST
power	Ni-MH, 6 elements	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
Current capacity	4500 mAh	0.5,	
Consumption	average 250 mA	FEV6, FEF75, EVOL, FIF50, EVC, RR, ti, Memory capacity	Up to 10000 tests
Backup battery voltage	none		
Batteries charger	Output voltage=12 V, current=1A, compliant with EN 60601-1		
Autonomy	~10 hours	Oximetry (on request)	
Connectivity	USB 2.0, Bluetooth®2.1	Measurement method	Red and infrared absorption
Display	7 inch colour touch screen LCD with 800x480 resolution	SpO2 range	0-99%
Display	absent, touchscreen	SpO2 accuracy	± 2% between 70-99% SpO2
Keyboard	absent, touchscreen	Average number of heart beats for the %SpO2 calculation	8 beats
Mouthpieces	Ø 30 mm (1.18 inch)	Pulse Rate range	18-300 BPM
Type of electrical Protection	Internally powered Class II while charging battery	Pulse Rate accuracy	± 2BPM or 2% whichever is greater
Safety level for shock hazard	Type BF Apparatus	Average interval for the calculation of cardiac pulse	8 seconds
Conditions of use	Apparatus for continuous use	Signal quality indication	0 - 8 segments on display
Storage conditions	Temperature: MIN -40 °C, MAX +70 °C	Test available	spot
	Humidity: MIN 10% RH; MAX 95%RH	Measured parameters	SpO2% min, max, average BPM min, max, average
Transport conditions	Temperature: MIN -40 °C, MAX +70 °C		Test duration
	Humidity: MIN 10% RH; MAX 95%RH	Memory capacity	% Bradycardia Duration (<40 BPM) % Tachycardia Duration (>120 BPM) % of Time with SpO2 ≤ 90% (T90%, T89%), T5
Operating conditions	Temperature: MIN + 10 °C, MAX + 40 °C		about 500 hours oximetry
	Humidity: MIN 10% RH, MAX 95%RH	Certificates & Registrations	
Applied norms	Electrical Safety EN 60601-1 Electro Magnetic Compatibility EN 60601-1-2	CE 0476	MED 9826
Degree of protection against water penetration	IPX1 appliance protected against water leaks	FDA 510 (k) Health Canada CND code	K 052140 71191 (class II) Z12150102 (spiro) Z1203020408 (spiro + oxy)
Codes and equipments		GMDN code Ministry of Health	46906 (spiro), 45607 (spiro + oxy) 1272475/R (spiro) 1272476/R (spiro + oxy) 1645455/R (spiro)
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		