

Personal Smart

SPIROBANKTM OXI

App-Based Spirometer with
embedded Oximeter.

The simplest device for accurate
Remote Patient Monitoring and
Homecare. Real time test available on
Smartphone via Bluetooth Smart 4.0



MAIN features



PAIR AND PLAY

Automatic pairing via Bluetooth BLE. Real-time plethysmographic curve and test result on your Smartphone.



MOBILE APP

Intuitive App for Spirometry and Oximetry, always included for iOS and Android Smartphones.



MEASURED PARAMETERS

Spirometry Parameters:
PEF, FEV1, FVC, FEV1/FVC, FEF2575, FEV6, VEXT, DTPEF, FEF75, FET, FEF25, FEF50, FIVC, FIV1, PIF, FEV3, FEV05, FEV075, FEV2.



COMPLIANCE ATS/ERS 2019

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



DISTINCTIVE features



SPIROMETRY GUIDELINES

Suitable for all ages from 5 to 93 years and multi-ethnic groups (GLI predicted sets).



REAL TIME OXIMETRY TEST

Innovative reflectance pulse-oximetry sensor (Touch). Easy to use and accurate.



SHARE MEDICAL REPORT ON APP

With anyone at anytime via eMail, Whatsapp, SMS, Cloud, Drive Bluetooth, Airdrop and more.

Always INCLUDED

- 2x AAA 1.5V Batteries
- Single Patient Reusable Turbine
- Plastic reusable mouthpiece
- User manual
- App for Smartphone (iOS and Android)

Compatible SOFTWARE

MIR SPIROBANK APP

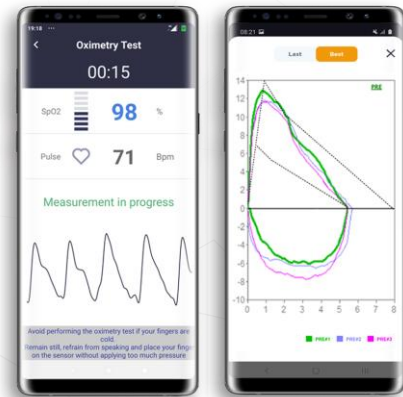
Mobile App (iOS and Android), for real time **spirometry** and **oximetry** test, directly on your Smartphone via Bluetooth Smart 4.0



REAL TIME TEST

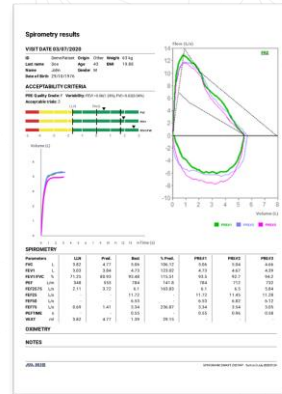
Spirometry: PEF, FVC, FEV1, FEV1/FVC ratio, FEV25/75, FEV6, VEXT, DTPEF, FEF75, FEF25, FEF50.

Oximetry: SpO2% (mean), Pulse BPM (mean)



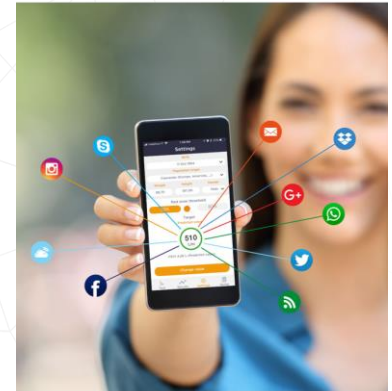
MEDICAL REPORT

Professional PDF report Including Acceptability Messages, Quality Control Grade, Acceptable Trials, Variability of FEV1 and FVC, Pictograms.



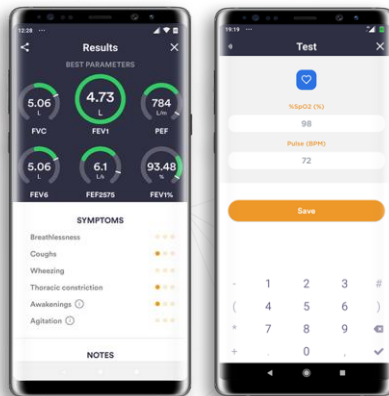
SHARE RESULTS

Share results in PDF With anyone at anytime via eMail, Whatsapp, SMS, Cloud, Drive Bluetooth, Airdrop and more.



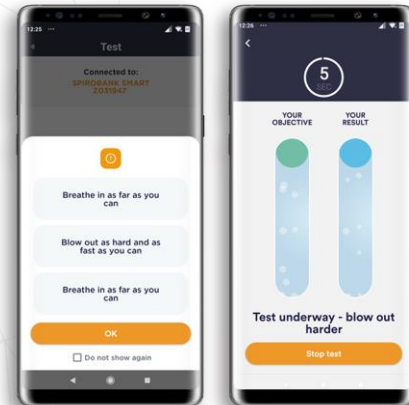
PERSONAL TREND

E-diary, symptoms and notes can be added for each test. Oximetry results can also be added manually on the App.



INCENTIVE

Real time animation on Smartphone, to improve personal compliance during the test



Compatible TURBINES

Single Patient Reusable Turbine



Mouthpiece

Included Reusable

Turbine Disinfection

Not required

Turbine Calibration

Not required

Packaging

Individually sealed: 1 unit / box

Antiviral Filter

Not required

flowMIR Disposable Turbine



Included Disposable

Not required

Not required

Individually sealed: 60 or 10 units / box

Not required



PLAY VIDEO REVIEW



SCIENTIFIC PUBLICATIONS





Applicable standards	ATS/ERS: 2005, 2019 Update ISO 26782: 2009 ISO 23747: 2015 ISO 14971: 2019 ISO 10993-1: 2018 2011/65/UE Directive EN ISO 15223: 2016 IEC 60601-1: 2005+Amd1:2012 EN 60601-1-2: 2015 IEC 60601-1-6: 2010+Amd2013 EN 60601-1-11: 2015 ISO 80601-2-61: 2017
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Technical specification

Width	49 mm
Length	109 mm
Thickness	21 mm
Weight	60.7 g (batteries included)

Turbine



Reusable Turbine with plastic Mouthpiece (code 910013)



Disposable Turbine (code 910004)

Mouthpiece	Ø 30 mm (1.18 inches)
Power supply	2 batteries AAA 1.5 V
Consumption	max 12 mA average 8 µA (Stand by)
Autonomy	5-10 years
IP protection level	IP22
Connectivity	Bluetooth® 4.0
Type of electrical protection	Internally powered
Safety level for shock hazard	Type BF Apparatus
Conditions of use	Apparatus for continuous use
Storage conditions	Temperature: MIN -25 °C, MAX + 70 °C Humidity: MIN 10% RH; MAX 93% RH
Operating Conditions	Temperature: MIN + 5 °C, MAX + 40 °C Humidity: MIN 15% RH, MAX 93% RH
Shipping conditions	Temperature: MIN -25 °C, MAX + 70 °C Humidity: MIN 10% RH; MAX 93% RH

Spirometry

Flow sensor	bi-directional digital turbine
Flow range	16L/s (960 L/m)
Volume range	10 L
Volume accuracy	±2.5% o ±0.05L
Flow accuracy	±5.0% o 0,20 L/s
Dynamic resistance	<0.5 cm H ₂ O/L/s (a 12 L/s)
Temperature sensor	none
Available test	FVC
Measured parameters	FEV1, PEF, FVC, FEV1/FVC, FEV6, FEF2575
Additional parameters available with F/V version	FIVC, FIV1, PIF FEF25, FEF50, FEF75, EVol, FEV05, FEV075, FEV2, FEV3, FET, PEF Time
Memory capacity	the application on the remote device (smartphone/tablet) memorizes data

Oximetry

Measuring method	double wavelength
%SpO₂ range	70%-100%
%SpO₂ accuracy	±1.9%
Average number of beats for the %SpO₂ calculation	12 beats
Pulse Rate range	30-200 BPM
Pulse Rate accuracy	±3%
Average interval for Pulse rate calculation	12 seconds
Quality signal indicator	0-8 lines
Available tests	spot
Measured parameters	%SpO ₂ MIN, %SpO ₂ MEAN, %SpO ₂ MAX, BPMMIN, BPMMEAN, BPMMAX, T _{TOTAL}
Wavelength sensors	Red 660 nm Infrared 880 nm
Maximum optical output power	1.2 mW

Certification & Registration

CE 0476	MED 9826
FDA 510 (k)	pending
Health Canada	pending
Codice CND	Z12150102
Codice GMDN	46906