Personal Smart

SPIROBANK® SMART

App-Based Spirometer

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

MIR
MEDICAL INTERNATIONAL RESEARCH

www.spirometry.com

MAIN features

AUTOMATIC PAIR AND PLAY

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

MEASURED PARAMETERS

Spirometry Parameters on App: FVC,FEV1, FEV1/FVC, PEF, FEF2575, FEF25, FEF50, FEF75, DTPEF, VEXT, FEV6

COMPLIANCE ATS/ERS 2019

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

MOBILE APP INCLUDED

Intuitive App for self-management of lung conditions, always included for iOS and Android

DISTINCTIVE features

SPIROMETRY GUIDELINES

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

COVID-19 PANDEMIC

Avoid going to the hospital or medical offices during COVID-19 pandemic

LIVE VIDEO EXAM

Connect with your Healthcare provider in real-time, from the comfort of your home

READY TO CONNECT

With 3rd party Apps for Professional Care, Personal Care and Clinical Trials

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

- Up- to 30 Spirometry parameters available via SDK!

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 test, directly on your Smartphone via Bluetooth Smart 4.0

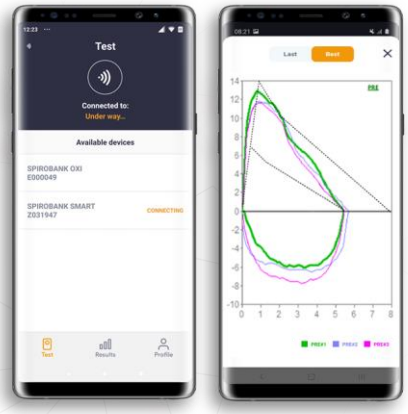
Add Oximetry results manually on the APP

GET IT ON Google Play

Download on the App Store

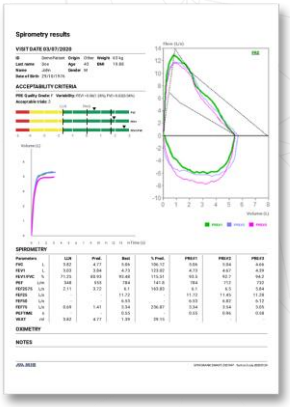
REAL TIME TEST

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



MEDICAL REPORT

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

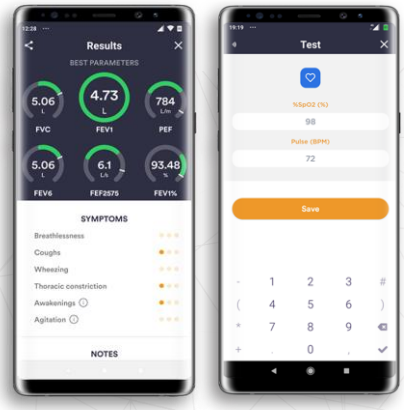


SHARE RESULTS

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

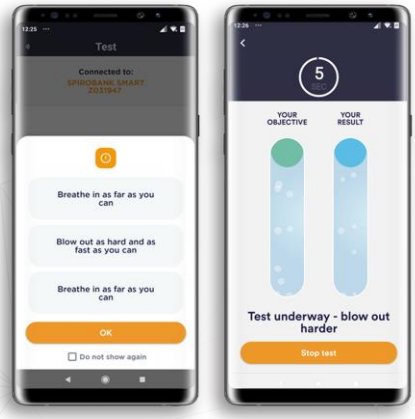
PERSONAL TREND

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

		Mouthpiece	Turbine Disinfection	Turbine Calibration	Packaging	Antiviral Filter
Single Patient Reusable Turbine		Included Reusable	Not required	Not required	Individually sealed: 1 unit / box	Not required
flowMIR ™ Disposable Turbine		Included Disposable	Not required	Not required	Individually sealed: 60 or 10 units / box	Not required

PLAY VIDEO

SCIENTIFIC PUBLICATIONS

Also available in MORE CONFIGURATIONS




Technical Specification	Spirobank Smart	Spirobank Oxi	Smart One	Smart One OXI
TYPE OF SPIROMETER	App-Based, for Remote Patient Monitoring	App-Based, for Remote Patient Monitoring, with Oximetry Option	App-Based, for Personal Care	App-Based, for Personal Care, with Oximetry Option
COMPATIBLE TURBINES	flowMIR™ Disposable Turbine, Single Patient Reusable Turbine	flowMIR™ Disposable Turbine, Single Patient Reusable Turbine	Single Patient Reusable Turbine	Single Patient Reusable Turbine
COMPATIBLE SOFTWARES	MIR Spirobank App, iSpirometry App	MIR Spirobank App	Smart One App	Smart One App
EXTERNAL CONTROL	Real time test on Smartphone screen. No internal memory, no display. Data are not stored in the device memory. Connect to your Smartphone via Bluetooth Smart BLE 4.0	Real time plethysmographic curve and test result on SmartPhone screen. No internal memory, no display. Data are not stored in the device memory Connect to your Smartphone via Bluetooth Smart BLE 4.0	Real time test on SmartPhone/Tablet screen. No internal memory, no display. Data are not stored in the device memory. Connect to your Smartphone/Tablet via Bluetooth Smart BLE 4.0	Real time plethysmographic curve and test result on SmartPhone/Tablet screen. No internal memory, no display. Data are not stored in the device memory. Connect to your Smartphone/Tablet via Bluetooth Smart BLE 4.0
EHR CONNECTIVITY	Ready-to-Connect with 3rd party Apps for Professional and Personal Care and Clinical Trials	Ready-to-Connect with 3rd party Apps for Professional and Personal Care and Clinical Trials	Ready-to-Connect with 3rd party Apps for Professional and Personal Care and Clinical Trials	Ready-to-Connect with 3rd party Apps for Professional and Personal Care and Clinical Trials
REAL TIME TEST	Simple and intuitive App for Smartphone, always included for iOS and Android E-diary, symptoms and notes can be added for each test. Test Results can be shared in PDF (via Whatsapp, E-mail, other Apps), and printed directly (via Bluetooth printer). Real time animation, to help performing a good test. Easy to read Spirometry Guidelines for test compliance.	Simple and intuitive App for Smartphone, always included for iOS and Android E-diary, symptoms and notes can be added for each test. Test Results can be shared in PDF (via Whatsapp, E-mail, other Apps), and printed directly (via Bluetooth printer). Real time animation, to help performing a good test. Easy to read Spirometry Guidelines for test compliance. Real time plethysmographic curve.	Simple and intuitive App for Smartphone and Tablet, always included for iOS and Android E-diary, symptoms and notes can be added for each test. Test Results can be shared in PDF (via Whatsapp, E-mail, other Apps), and printed directly (via Bluetooth printer). Real time animation, to help performing a good test. Easy-to-read graphic trends for self-assessment.	Simple and intuitive App for Smartphone and Tablet, always included for iOS and Android E-diary, symptoms and notes can be added for each test. Test Results can be shared in PDF (via Whatsapp, E-mail, other Apps), and printed directly (via Bluetooth printer). Real time animation, to help performing a good test. Easy-to-read graphic trends for self-assessment. Real time plethysmographic curve.
MEASURED PARAMETERS	Spirometry Parameters: PEF, FVC, FEV1, FEV1/FVC, FEF2575, FEV6, VEXT, DTPEF, FEF75, FET, FEF25, FEF50, FIVC, FIV1, PIF, FEV3, FEV05, FEV075, FEV2 on MIR Spirobank App: PEF, FEV1, FVC, FEV1/FVC, FEF2575, FEV6, VEXT, DTPEF, FEF75, FEF25, FEF50 on iSpirometry App: PEF, FVC, FEV1, FEV1/FVC, FEF2575, FEV6	Spirometry Parameters: PEF, FEV1, FVC, FEV1/FVC, FEF2575, FEV6, VEXT, DTPEF, FEF75, FET, FEF25, FEF50, FIVC, FIV1, PIF, FEV3, FEV05, FEV075, FEV2 Oximetry Parameters: %SpO2min, %SpO2mean, %SpO2max, BPMmin, BPMmean, BPMmax, Ttotal on MIR Spirobank App: Spirometry Parameters: PEF, FEV1, FVC, FEV1/FVC, FEF2575, FEV6, VEXT, DTPEF, FEF75, FEF25, FEF50 Oximetry Parameters: SpO2 (%), Pulse (BPM)	Spirometry Parameters: PEF, FEV1	Spirometry Parameters: PEF, FEV1 Oximetry Parameters: %SpO2min, %SpO2mean, %SpO2max, BPMmin, BPMmean, BPMmax, Ttotal on MIR Smart One App: Spirometry Parameters: PEF, FEV1 Oximetry Parameters: SpO2 (%), Pulse (BPM)

COMPARE ON WEBSITE

TECHNICAL datasheet

PRODUCT CODE 911105

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)

Power supply	2 batteries AAA 1.5 V	
Consumption	max 12 mA Stand by 8 μA medium	
Backup battery voltage	none	
Batteries charger	none	
Autonomy	5-10 years (Stand by)	
Connectivity	Bluetooth® 4.0	
Mouthpieces	Ø 30 mm (1.18 inch)	
Type of electrical protection	Internally powered	
Safety level for shock hazard	Type BF Apparatus	
IP protection level	IP22	
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 10% RH, MAX 93%RH
Shipping conditions	Temperature:	MIN -25 °C, MAX + 70 °C
	Humidity:	MIN 10% RH; MAX 93%RH

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

Spirometry

Flow sensor	bi-directional digital turbine
Flow range	±16L/s
Volume accuracy	±2.5% or 0,05 L
Flow accuracy	±5.0% or 0,20 L/s
Dynamic resistance	<0.5 cm H2O/L/s
Temperature sensor	none
Test available	FVC,
Measured parameters	FEV1, PEF, FVC, FEV1/FVC ratio, 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 smart phone memorizes data

Certificates & Registrations

CE 0476	MED 9826 by Kiwa-Cermet
FDA 510(k)	K072979
CND code	Z12150102
GMDN code	46906

MIR
MEDICAL INTERNATIONAL RESEARCH

ITALY
MIR Head Office
Via del Maggiolino, 125
00155 Roma
Tel. +39 06 22 754 777
Fax +39 06 22 754 785
Mir.spirometry.com

USA
MIR USA, Inc.
5462 S. Westridge Drive
New Berlin, WI 53151
Phone +1 (262) 565-6797
Fax +1 (262) 364-2030

FRANCE
MIR Local Office
Jardin des Entreprises,
290, Chemin de Saint Dionisy
30980 LANGLADE (France)
Phone +33 (0)4 66 37 20 68
Fax +33 (0)4 84 25 14 32