Personal Smart

SMART ONE® OXI

App-Based Spirometer with embedded Oximeter.

The simplest device for Personal Care.
Real time test available on Smartphone and Tablet 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 and Tablet

MEASURED PARAMETERS

Spirometry Parameters: PEF, FEV1

Oximetry Parameters: %SpO2min, %SpO2mean, %SpO2max, BPMmin, BPMmean, BPMmax, Ttotal

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 cardiorespiratory 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)

REAL-TIME OXIMETRY

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

MEDICAL REPORT

Share with anyone at anytime via eMail, Whatsapp, SMS, Cloud, Drive and other Apps

COVID-19 PANDEMIC

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

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

Always INCLUDED

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

Compatible SOFTWARE

MIR SMART ONE APP

Mobile App (iOS and Android), for real time **Spirometry and Oximetry** test, directly on your Smartphone and Tablet via Bluetooth Smart

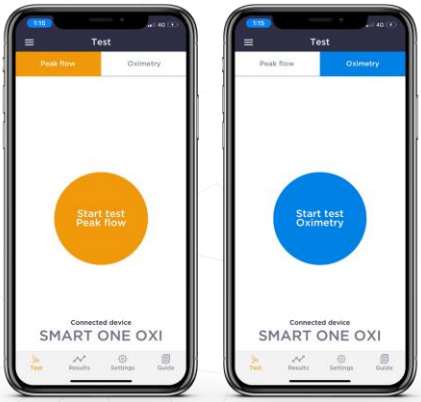
GET IT ON Google Play

Download on the App Store

REAL TIME TEST

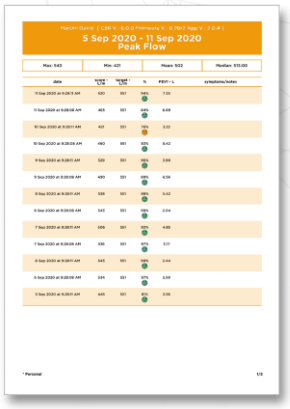
Spirometry: PEF, FEV1

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



MEDICAL REPORT

PDF report available for selectable date range. Include test results, traffic light indicators for PEF and e-Diary.



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 scoring and notes can be added for each test. Graphic trends available for self-monitoring of PEF, FEV1 and SpO2

INCENTIVE

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

Compatible TURBINE

	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

PLAY VIDEO

SCIENTIFIC PUBLICATIONS

TECHNICAL datasheet

PRODUCT CODE 911120

Technical specification

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

Turbine

Single Patient Reusable Turbine with Mouthpiece (code 910013)

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 (Stand by)
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 10% 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% or 0,05 L
Peak Flow accuracy	±10% or 0,33 L/s
Dynamic resistance	<0.5 cm H2O/L/s (@ 12 L/s)
Temperature sensor	none
Available test	Peak Flow
Measured parameters	FEV1, PEF
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 calculation % SpO2	12 beats
Pulse Rate range	30-200 BPM
Pulse Rate accuracy	±3%
Average interval for BPM calculation	12 seconds
Quality signal indicator	0-8 lines
Available tests	spot
Measured parameters	$\%SpO_{2MIN}$, $\%SpO_{2MEAN}$, $\%SpO_{2MAX}$, BPM_{MIN}, BPM_{MEAN}, BPM_{MAX}, T_{TOTAL}
Wavelength sensors	Red 660 nm Infrared 880nm
Maximum optical output power	1.2 mW

Certification & registration

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

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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