MIR

Minispir

USB Spirometer
Real time tests directly on PC

CardioTech

CardioTech Sdn. Bhd. (492981-P)
Email: cardiotechsb@gmail.com
Tel: +6012-782 9668

www.cardiotech.com.my

Key features

Plug & Play
Device powered via integrated USB cable, without screen, without internal memory and with direct data recording on MIR Spiro software

Real-time tests
Real-time testsdisplayed on the PC screen via MIR Spiro software
Spirometry: FVC, VC, MVV, PRE/POST bronchodilator comparison

Pediatric incentive
Real-timeanimation for improved patient collaboration during the test

Integrated temperature sensor
Automatic BTPS Conversion

Predicted values
Wideselection ofpredicted values including GLI, ERS and others in PC mode

EMR/EHR connectivity
Integrationvia MIR Spiro software with EMR/EHR (in HL7, GDT, FHIR, EXCHANGE PROTOCOL)

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Compatible turbines

		Mouthpiece	Turbine disinfection	Turbine calibration	Packaging	Antiviral filter
FlowMIR® disposable turbine		Disposable included	Not required	Not required	Individually packaged: packs of 60 pieces	Optional
reusable turbine Single patient		not included Required,	Required	Required	Pack of 1 unit	Recommended by ATS

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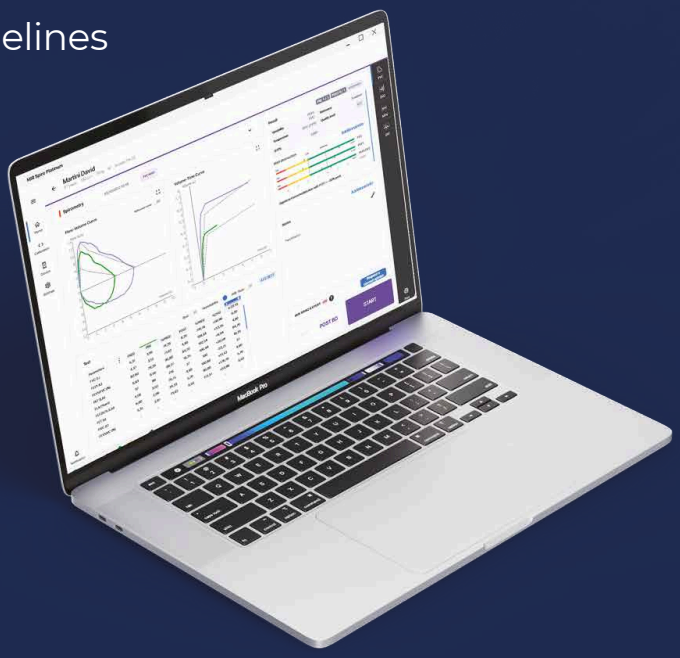
How to use

Minispir works when connected
to PC via integrated USB cable

MIR Spiro software

- Comprehensive software forspirometryand oximetry
- Designed to be integrated with EMR/EHR
- Complies with the latest ATS/ERS guidelines
- Available for desktop and laptop use
- MacOS and Windows



All MIR professional devices
work with MIR Spiro software,
the latest generation software
for spirometry and oximetry.

Platinum Card

To subscribe to a Platinum
subscription plan
it is necessary to have
the MIR Spiro Platinum Card.

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Measured parameters

	From MIRSpiro software via connection to the device
Spirometry	FVC, FEV1, PEF, FEF75, FEF25-75, FET, FEV1/FVC, FEV6, FEV1/FEV6, FEF25, FEF50, FIVC, FEV1/VC, ELA, MVV(cal), Time to PEF, FEV0.5, FEV0.5/FVC, FEV0.75, FEV0.75/FVC, FEF75-85, Extr. Vol, VC, EVC, IVC, IC, VC, ERV FEV3, FIV1, FIV1/FIVC, PIF, FEV3/FVC, PIF, FEV2, FEV2/FVC, FIF25, FIF50, FIF75, R50, FEV1/PEF (EI), FEV1/FEV0.5 (RFEV), TV, VE, RR, tI

Datasheet

Size	49.7 x 142 x 26 mm 65 g
Weight	·Reusable Turbine (code
Turbines	910002) ·Disposable turbine (code 910004) 5V USB connection 0.25W 50mA max absent USB 2.0 absent Ø 30
Supply voltage	mm (1.18 inches) IPX1 Class II
Nominal electrical power	device Type BF device Device
Nominal input current	for continuous use Temp: MIN
Backup battery voltage	-40°C, MAX+70°C Humidity:
Connectivity	MIN 10% RH; MAX 95%RH Temp:
Display	MIN +10°C, MAX +40°C
Mouthpiece	Humidity: MIN 10% RH, MAX
IP protection level	95%RH MIR Spiro PC software
Electrical protection	database
Electrical safety level	
Terms of use	
Storage conditions	
Terms of use	
PC Software	
Memory capacity	

Spirometry	
Flow sensor	two-way digital turbine
Flow Range	± 16 L/s
Volume accuracy (ATS 2019)	± 2.5% or 50 mL
Flow accuracy	± 5% or 200 mL/s
Dynamic resistance	< 0.5 cm H20/L/s
Temperature sensor	semiconductor(0-45°C)
Available tests	FVC, VC, IVC, MVV, PRE-POST
Measured parameters	FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, TPEF, FEF25, FEF50, FEF75, FEF2575, FEF7585, FET, FEV05, FEV05%, FEV075, FEV075%, FEV2, FEV2%, ELA, BEV, FIVC, FIV1, PIF, FIV1/FIVC%, PIF, IRV, VC, IVC, EVC, IC, EI, RFEV, ERV, FIVC, FIV1/FIVC, FEV1/VC%, FIF25, FIF50,FIF75, R50, VT, VE, RR, tI, tE, ti/tTOT, VT/tI, MVV, MVV cal, MV
Certificates and registrations	MDR 2017/745
	K 122384
CE 0476 FDA 510 (k)	71191 (Class II)
Health Canada EMDN	Z121501
liv.4 CND Code	Z12150102
GMDN Code Ministry	46906 (spiral)
of Health	2494682/R (91100610) 2494688/R (91100611)
Applicable regulations	Electrical Safety IEC 60601-1 Electro Magnetic Compatibility EN 60601-1-2 ISO 26782: 2009 ISO 23747: 2015 ATS/ERS:2005, 2019(update) IEC 60601-1-6:2010 IEC 60601-1-9:2007+AMD1:2013 IEC 62304:2006 + A1:2015 ISO 10993-1:2018

Compliance with guidelines and standards
Spirometry:ATS/ERS2005 +updateto2019;
ISO 23747: 2015; ISO 26782: 2009

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