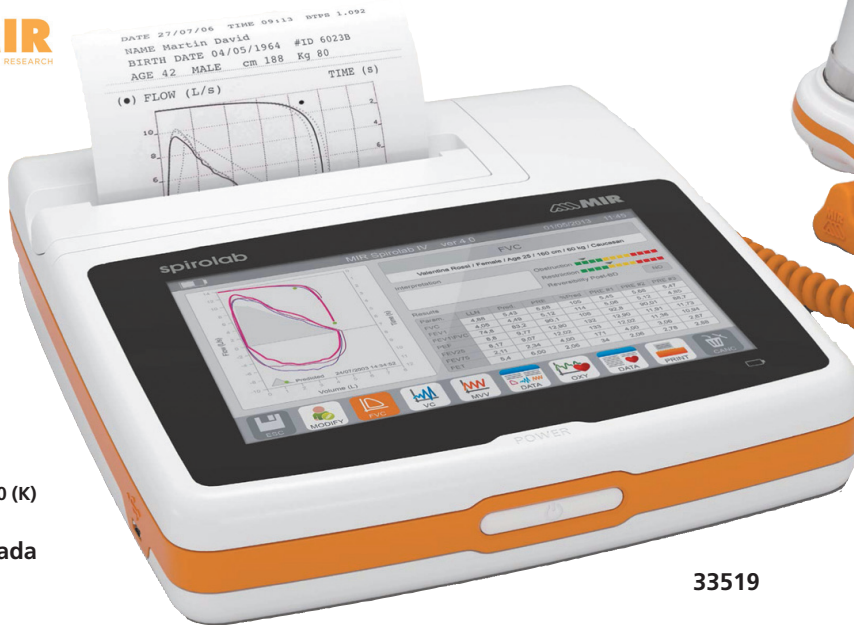


SPIROLAB SPIROMETER: 7" TOUCHSCREEN AND SPO₂ OPTION



Miniflowmeter for reusable and disposable turbine (Ø 30 mm)

CE 0476
 FDA 510 (K)
 Health Canada

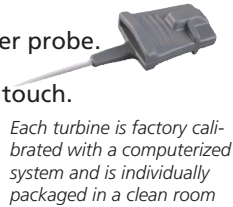
- 7" TOUCHSCREEN DISPLAY
- PEDIATRIC INCENTIVE SYSTEM
- DATABASE FOR 10,000 TESTS
- USB 2.0, BLUETOOTH 2.1

33519

- 33519 SPIROLAB® SPIROMETER WITH 7" TOUCHSCREEN
 - 33520 SPIROLAB® SPIROMETER WITH 7" TOUCHSCREEN AND SpO₂
- Fast, simple, durable diagnostic spirometer, made in Italy.
Unbeatable features
- FVC, VC, MVV, PRE/POST Bronchodilator comparison with a wide range of selectable parameters
 - long life rechargeable battery
 - colour Touchscreen 7" display
 - direct connection to external USB Printer PostScript
 - 10,000 Spirometry tests or 500 hours of oximetry recording
 - wireless Real Time test on PC via Bluetooth®
 - fast and silent built-in B/W printer with customizable printout format
 - selectable internal software languages: GB, FR, IT, ES, DE, PT

Oximetry option
 Available adult and pediatric reusable finger probe.
Fast and user friendly
 Each function can be activated by a simple touch.

FlowMIR® disposable turbine - complies with ATS/ERS standard
 Totally disposable (mouthpiece, turbine) guarantees 100% hygiene, no cross contamination. No calibration required.
 Suitable also for pediatric use without need of adaptor.



Each turbine is factory calibrated with a computerized system and is individually packaged in a clean room



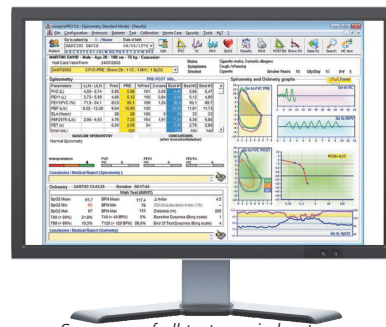
33507

Suitable for children

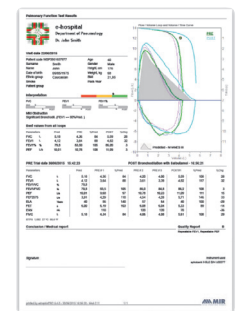
Patented pediatric incentive directly on the screen.

WinspiroPRO®

High performances PC software for spirometry and oximetry with free update. Multilanguage software: GB, FR, IT, ES, DE, PT, PL, NL, LV, SE, CZ, RU, TR, JP, CN.



Summary of all tests carried out



Printout: spirometry report

STANDARD ACCESSORIES

- Carrying case
- Battery charger
- 1 roll thermal paper
- Reusable turbine
- Nose clip
- Software WinspiroPRO®
- USB port and cable
- SpO₂ adult sensor (33520 only)
- CD manual: GB, FR, IT, ES, DE, PT



TECHNICAL SPECIFICATIONS - SPIROMETRY

Power supply:	Rechargeable battery
Autonomy:	approx. 10 hours
Temperature sensor:	semiconductor (0-45°C)
Flow sensor:	bi-directional digital turbine
Flow range:	±16L/s
Volume accuracy:	±3% or 50mL
Flow accuracy:	±5% or 200mL/s
Dynamic resistance:	<0.5 cm H ₂ O/L/s
Connectivity:	USB 2.0, Bluetooth® 2.1
Display:	7" colour touch screen LCD, 800x480 resolution
Mouthpieces:	Ø 30 mm (1.18 inch)
Dimensions:	220x210x51 mm (8,66x8,26x2")
Weight:	1450 g (battery pack included) (3,1lb)
Electrical protection:	Class II
Norms:	Electrical safety standard EN 60601-1 Electromagnetic compatibility EN 60601-1-2

SPIROMETRY PARAMETERS

FVC, FEV1, FEV1/FVC, PEF, FEF25, FEF50, FEF75, FEF25-75, FEF75-85, Lung Age, Extrapolated Volume, FET, Time to PEF, FEV0.5, FEV0.5/FVC, FEV0.75, FEV0.75/FVC, FEV2, FEV2/FVC, FEV3, FEV3/FVC, FEV6, FEV1/FEV6, FEV1/PEF, FEV1/FEV0.5, FIVC, FIV1, FIV1/FIVC, PIF, FIF25, FIF50, FIF75, FEF50/FIF50, VC, IVC, IC, ERV, IRV, Rf, VE, VT, tl, tE, VT/tl, tE/tTOT, MVV (measured), MVV (calculated).

WINSPIROPRO® REQUIREMENTS

Windows 2000, Xp, Vista (32/64 bit), 7 (32/64 bit), 8 and 8.1 (32/64 bit), 10 (32/64 bit). RAM 512 MB

GIMA code	MIR code	ACCESSORIES AND SPARES	Minimum order
33695	919024	SpO ₂ probe - adult - spare	
33696	939006 + 919200	SpO ₂ probe - paediatric	
33697	910595	Miniflowmeter with cable - spare	
33410	-	Adult mouthpiece - Ø 30 mm ext	box of 500
33492	-	Thermal paper - 112 mm x 25 m	-
33525	-	Antibacterial filter - disposable	box of 50
33507	910004	Disposable turbine with integrated mouthpiece	box of 60

TECHNICAL SPECIFICATIONS - OXIMETRY (33520 only)

SpO ₂ range:	0-99%
SpO ₂ accuracy:	± 2% between 70-99% SpO ₂
Pulse Rate range:	18-300 BPM
Pulse Rate accuracy:	± 2BPM or 2% whichever is greater
Memory capacity:	up to 500 hours oximetry

OXIMETRY PARAMETERS (33520 only)

%SpO₂ and Pulse Rate (Min, Max, Average), Test duration, Total SpO₂ Events, T90% (SpO₂ time ≤89%), T89% (SpO₂ time ≤88%), T40 (Bradycardia duration with Pulse Rate <40 BPM), T120 (Tachycardia duration with Pulse Rate >120 BPM)