



Technical specification

Width	55 mm
Length	160 mm
Thickness	25 mm
Weight	140 g (battery pack included)

Turbina



Reusable turbine (cod. 910002)



Disposable turbine (cod. 910004)

Power supply Rechargeable Lithium-Ion 3.7V, 1100 mAh

Current capacity 1100 mAh

Consumption ~20-30 mA (during test)

Batteries charger voltage=5 V DC,
current=minimum 500 mA,
Connector: micro USB B-type
compliant with EN 60601-1

autonomy 50 hours

Connectivity USB 2.0, Bluetooth® 4.0

Display LCD monochrome, 160 × 80 pixel

Keyboard membrane keyboard with 6 keys

Mouthpieces Ø 30 mm (1.18 inch)

Type of electrical protection Internal power supply

Safety level for shock hazard Type BF Apparatus

Conditions of use Apparatus for continuous use

Conditions of storage Temperature: MIN -20 °C,
MAX + 60 °C
Humidity: MIN 10% RH;
MAX 95%RH

Operating Conditions Temperature: MIN + 10 °C,
MAX + 40 °C
Humidity: MIN 10% RH,
MAX 95%RH

Applied norms Electrical Safety Standard
IEC 60601-1:2005 + A1: 2012
Electro Magnetic Compatibility
EN 60601-1-2:2015
ISO 26782: 2009
ISO 23747: 2015
ATS/ERS: 2005, 2019 update

Spirometry

Flow sensor	bi-directional digital turbine
Flow range	±16L/s
Volume accuracy	±2.5% or 50 mL
Flow accuracy	±5% or 200 mL/s
Dynamic resistance	<0.5 cm H ₂ O/L/s
Temperature sensor	semiconductor (0-45°C)
Test available	FVC, VC, IVC, MVV, PRE-POST
Measured parameters	FVC, FEV1, FEV1/FVC%, DTPEF, FEV 0.5, FEV0.5/FVC%, FEV0.75, FEV0.75/FVC%, FEV2, FEV2/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25, FEF50, FEF75, FEF25-75, FEF75- 85%, FET, Vext, ELA, EVOL, FIVC, FIV1, PIF, FIV1/FIVC%, FIF25, FIF50, FIF75, R50, PIF, IRV, VC, IVC, IC, ERV, FEV1/VC%, TV, VE, RR, t _i , t _E , t _i /t _{tot} , TV/t _i , MVV
Memory capacity	Up to 10000 tests

Oximetry (on request)

Measurement method	Red and infrared absorption
SpO2 range	0-99%
SpO2 accuracy	± 2% between 70-99% SpO2
Average number of heart beats for the %SpO2 calculation	8 beats
Pulse Rate	
Range	30-300 BPM
Accuracy	± 2BPM or 2% whichever is greater
Averaging interval for	8 seconds average
Signal quality indication	0 - 8 segments on display
Test available	spot
Measured parameters	SpO2% min, max, average BPM min, max, average Test duration % Bradycardia Duration (<40 BPM) % Tachycardia Duration (>120 BPM) % of Time with SpO2 ≤ 90% (T90%, T89%)
Memory capacity	up to 300 hours oximetry

Certificati e registrazioni

CE 0476	MED 9826
FDA 510 (k)	K 061712
CND code	Z12150102 (spiro) Z1203020408 (spiro + oxi)
GMDN code	46906 (spiro), 45607 (spiro + oxi)