

TECHNICAL datasheet

PRODUCT CODES - Spirobank II Advanced Configurations

911020E0 - Spirometer • 911020E1 - Spirometer with reusable turbine

911025E0 - Spirometer + Oximeter • 911025E1 - Spirometer + Oximeter with reusable turbine

Technical specification

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

Turbine



Reusable turbine (code 910002)



Disposable turbine (code 910004)

Power supply

Rechargeable Lithium-Ion 3.7V,
1100 mAh
1100 mAh
~20-30 mA (during test)
none
voltage=5 V DC,
current=minimum 500 mA,
input current= 100VAC - 240 VAC
Connector: micro USB type B
compliant with EN 60601-1
50 hours

Autonomy Connectivity

USB 2.0, Bluetooth® 2.1
LCD monochrome, 160 × 80 pixel
membrane keyboard with 6 keys
Ø 30 mm (1.18 inch)
Internally powered

Type of electrical protection Safety level for shock hazard Conditions of use

Type BF Apparatus
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
EN 60601-1
Electro Magnetic Compatibility
EN 60601-1-2

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 H2O/L/s
Temperature sensor	semiconductor (0-45°C)
Test available	FVC, VC, IVC, MVV, PRE-POST 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, FIVOL, FIVC, FIV1, PIF, FIV1/FIVC%, FIF25%, FIF50%, FIF75%, R50, PIF, IRV, VC, IVC, IC, ERV, FEV1/VC%, TV, VE, RR, ti, te, ti/t-tot, TV/ti, MVV
Measured parameters	Up to 10000 tests

Memory capacity

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	18-300 BPM
Pulse Rate accuracy	± 2BPM or 2% whichever is greater
Average interval for the calculation of cardiac pulse	8 seconds
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

Certificates & Registrations

CE 0476	MED 9826
FDA 510 (k)	K 061712
Health Canada	71191 (class II), 75535 (class III)
CND code	Z12150102 (spiro) Z1203020408 (spiro + oxy)
GMDN code	46906 (spiro), 45607 (spiro + oxy)
Ministry of Health	1038066/R (spirometer) 1038086/R (spirometer + oximeter)

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