

TECHNICAL datasheet

PRODUCT CODES - Spirobank II Smart Configurations

911028E0 - Spirometer • 911028E1 - Spirometer with reusable turbine

911029E0 - Spirometer + Oximeter • 911029E1 - 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

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
50 hours

Autonomy

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 H2O/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 Signal quality indication	8 seconds average
Test available	0 - 8 segments on display
Measured parameters	spot 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
CND code	Z12150102 (spiro)
	Z1203020408 (spiro + oxi)
GMDN code	46906 (spiro), 45607 (spiro + oxi)

ITALY

MIR Head Office
Via del Maggiolino, 125
00155 Roma
Tel. +39 06 22 754 777
Fax +39 06 22 754 785
Mir.spirometry.com

USA

MIR USA, Inc.
5462 S. Westridge Drive
New Berlin, WI 53151
Phone +1 (262) 565-6797
Fax +1 (262) 364-2030

FRANCE

MIR Local Office
Jardin des Entreprises,
290, Chemin de Saint Dionisy
30980 LANGLADE (France)
Phone +33 (0)4 66 37 20 68
Fax +33 (0)4 84 25 14 32