LIGHT

SPIROBANK II BASIC®

Handheld, Stand-alone and PC-based Spirometer

Easy-to-use, ideal for family doctors, occupational medicine, screening









MAIN features



REAL-TIME TEST



SPIROMETRY **PARAMETERS**



COMPLIANCE **ATS/ERS 2019**

Spirometry: FVC, VC, IVC, MVV, PRE/POST Bronchodilator comparison

FVC, FEV1, FEV1%, PEF. FEF25-75, FET, Extrap. Volume, Estimated Lung Age, VC, IVC, IC, ERV

And other Standards including ISO 26782 (for Spirometry), ISO 23747 (for PEF), and more. CE0476, FDA 510 (k)



CARRY EVERYWHERE

Internal Storage up to 10.000 Spirometry tests

Long lasting Lithium battery, rechargeable via

High resolution backlight display

Carrying case included



PC CONNECTION **AVAILABLE**

Real-time test on PC screen, connect with your EHR/EMR, back-up internal memory and more, via USB











PREDICTED SETS & VALUES

Large Selection, including comparison %Pred. Z-score and LLN. Include GLI in PC-mode

園

EASY TO USE IN PRACTICE

ideal for family doctors, occupational medicine, sport medicine, generic practice

EHR/EMR CONNECTIVITY

Via PC, integration with patient database on your EHR/EMR (in HL7, GDT)

COVID-19 **PREVENTION**

Complete Disposable Set with Antiviral filter available, to reduce risk of cross-contamination

Always **INCLUDED**

- Carrying case
- USB cable

- Noseclip
- PC Software license

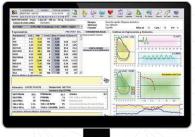
Compatible **SOFTWARE**

**** winspiroPRO





Pediatric Incentive (PATENTED) to improve patient compliance during the test.



Acceptabilty Messages, Test interpretation and Quality Control Grade according to the latest **Spirometry Standards**

MAIN FEATURES

Windows-based solution for Spirometry, Oximetry and Telemedicine.

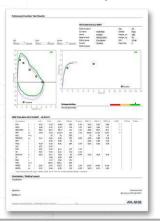
Wide range of predicted sets and values, including GLI Predicted sets, LLN and Z–score.

Embedded EHR/EMR connectivity.

NET VERSION available, share one database between different PC workstations.

MEDICAL REPORT

Specialized and customizable printout



**** spiro Connect







MAIN FEATURES

Windows-based solution, **direct integration** with your EHR/EMR.

Real time test include **Spirometry**

Standardized communication in **HL7 or Exchange Protocol**.

Select patient info directly from your own **EHR/EMR**

Spirometry test: FVC-Pre, FVC-Post, VC-Pre

GO-TO-MARKET TOOLKIT

Software Development Kit available for System Integrators and App Developers.

OEM service available for Spirometry and Oximetry.



Learn more about available SDK and OEM



Compatible **TURBINES**

| | | Mouthpiece | Turbine Disinfection | Turbine Calibration | Packaging | Antiviral Filter |
|------------------------------------|--|---------------------------|-------------------------|------------------------|---|-------------------------|
| flowMIR ™ Disposable Turbine | AND AND CONTROL CONTRO | Included Disposable | Not required | Not required | Individually sealed: 60 or 10 units / box | Available Disposable |
| Reusable Turbine | AN A | Required, Not Included | Required | Required | 1 unit in Carton box | Required Disposable |





Also available in **MORE CONFIGURATIONS**







Technical Specification

Spirobank II Basic

Spirobank II Advanced

Spirobank II Smart

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|-------------------------|---|---|---|
| TYPE OF SPIROMETER | StandAlone + PC | StandAlone + PC, with Oximetry Option | StandAlone + PC + App, with Oximetry Option |
| COMPATIBLE TURBINES | flowMIR™ Disposable Turbine, Reusable Turbine Flowmeter | flowMIR™ Disposable Turbine, Reusable Turbine Flowmeter | flowMIR™ Disposable Turbine, Reusable Turbine Flowmeter |
| COMPATIBLE SOFTWARES | | Winspiro PRO, spiro Connect | MIR Spiro App, Winspiro PRO, spiro Connect |
| EXTERNAL CONTROL | Real-Time test on PC screen, connect with your EHR/EMR, back-up internal memory and much more | Real-Time test on PC screen, connect with your EHR/EMR, back-up internal memory, and much more | Real-Time test on Tablet screen and PC screen, connect with your EHR/EMR, back-up internal memory, and much more |
| | Connect to your PC via USB | Connect to your PC via USB and Bluetooth 2.0 | Connect to your PC via USB (no Bluetooth) Connect to your Tablet via Bluetooth Smart BLE 4.0 |
| EHR CONNECTIVITY | Via PC, integration with patient database on your EHR/EMR (in HL7, GDT) | Via PC, integration with patient database on your EHR/EMR (in HL7, GDT) | Via PC: integration with patient database on your EHR/EMR (in HL7, GDT) Via APP: transfer data to a remote server in HL7 standards |
| MEASURED PARAMETERS | Spirometry: FVC, VC, IVC, PRE/POST Bronchodilator comparison Spirometry: FVC, VC, IVC, IC, ERV, FEV1, FEV1%, PEF, FEF 25-75, FET, EVOL, ELA | Spirometry: FVC, VC, IVC, MVV, PRE-POST Bronchodilator comparison Oximetry (optional): Spot test (SpO2, BPM) Spirometry: FVC, FEV1, FEV1/FVC%, DTPEF, FEV 0.5, FEV0.5/FVC%, FEV0.75, FEV0.75, FEV0.75/FVC%, FEV2, FEV2/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF525%, FEF55%, FEF55%, FIF50%, FIF75%, R50, PIF, IRV, VC, IVC, IC, ERV, FEV1/VC%, TV, VE, RR, ti, te, ti/t-tot, TV/ti, MVV Oximetry (Optional): 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%) | Spirometry: FVC, VC, IVC, MVV, PRE-POST Bronchodilator comparison Oximetry (optional): Spot test (SpO2, BPM) Spirometry: 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, FEF5, 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, tl, te, tl/t-tot, TV/tl, MVV Oximetry (Optional): SpO2% (min, max, average), BPM (min, max, average), Test duration, % Bradycardia Duration (<40 BPM), % Tachycardia Duration (<40 BPM), % Tachycardia Duration (>120 BPM), % of Time with SpO2 ≤ 90% (T90%, T89%) on MIR Spiro App: Spirometry: FVC, VC, PRE/POST Bronchodilator comparison Parameters: FVC, FEV1, FEV1%, PEF, FEF25-75, FET, Lung Age, VC, IVC. Oximetry (Optional): %SpO2 [Baseline, Min, Max, Mean], Pulse Rate [Baseline, Min, Max, Mean] Events. |



TECHNICAL datasheet

PRODUCT CODES - Spirobank II Basic Configurations 911021E0 - Spirometer 911021E1 - Spirometer with reusable turbine

Technical specification

 Width
 55 mm

 Length
 160 mm

 Thickness
 25 mm

Weight 140 g (battery pack included)

Turbine

mAh

Reusable turbine (code 910002

Disposable turbine (code 910004)

Power supply Rechargeable Lithium-Ion 3.7V, 1100

Current capacity 1100 mAh

Consumption ~20-30 mA (during test)

Backup battery voltage none

Batteries charger voltage=5 V DC,

current=minimum 500 mA, input current= 100VAC - 240 VAC Connector: micro USB type B compliant with EN 60601-1

Autonomy 50 hours Connectivity USB 2.0

DisplayLCD monochrome, 160 × 80 pixelKeyboardmembrane keyboard with 6 keys

Mouthpieces Ø 30 mm (1.18 inch)

Type of electrical Internally powered

protection

Safety level for Type BF Apparatus

shock hazard

Operating Conditions

Conditions of use Apparatus for continuous use

Conditions of storage Temperature: MIN -20 °C,

MAX + 60 °C

Humidity: MIN 10% RH;

MAX 95%RH

 $MIN + 10 \,^{\circ}C$, $MAX + 40 \,^{\circ}C$

MAX 95%RH

Humidity:

Temperature:

MIN 10% 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 mLFlow accuracy±5% or 200 mL/sDynamic resistance<0.5 cm H2O/L/s</th>Temperature sensorsemiconductor (0-45°C)

Test available FVC, VC, IVC, POST

Measured parameters FVC, VC, IVC, IC, ERV, FEV1, FEV1%, PEF, FEF 25-75, FET, EVOL, ELA

Memory capacity Up to 10000 tests

Certificates & Registrations

 CE 0476
 MED 9826

 FDA 510 (k)
 K 061712

 Health Canada
 71191 (class II)

 CND code
 Z12150102 (spiro)

GMDN code 46906 (spiro)
Ministry of Health 1271099/R (spirometer)

