

New Minispir[®] Line

USB Spirometers

**COPD and Asthma screening
has never been so intuitive
and inexpensive**

**Ideal for integrated
custom applications**



**Minispir[®]
for complete
respiratory analysis**

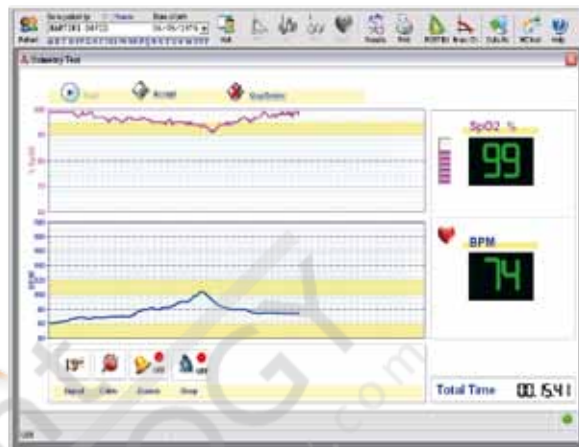
**Minispir[®] Light
for essential
spirometry testing**

Minispir®

mini-laboratory
for spirometry and oximetry

WinspiroPRO®

high performance
PC software



Pediatric Incentive Animations



Plugs directly into the USB port.
Real time Flow/Volume loop and Volume/time curve with PRE/POST comparison.
Advanced spirometry test interpretation.
Pediatric incentive animations.
Estimated Lung Age (ELA).

Bronchial provocation test including new **Mannitol** protocol with FEV1 response curve.
Temperature sensor for BTPS conversion.

Option available: Oximeter module
(it can be purchased separately)

WinspiroPRO® is a unique spirometry and oximetry software, which comes standard with **Minispir®**

All patient records are shown on simple, single-screen patient cards with dynamic management of all data and graphs.

WinspiroPRO® can easily be connected to a hospital database or EMR and occupational health system. **(HL7 interface)**

Supports NHANES III standard.
Network Version available on request

Minispir® light

COPD and Asthma
intuitive screener

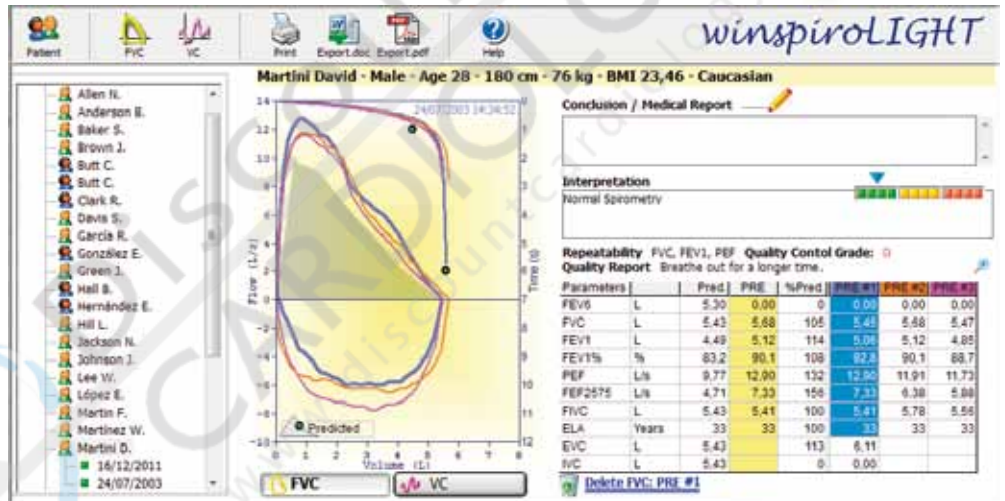
Winspiro® light

simplified spirometry
PC Software



All spirometry functions in one screenshot

Patient Data
Spirometry Test
Print and Export



Minispir® light measures the essential parameters for a diagnostic spirometry:

FEV6, FVC, FEV1, FEV1%, PEF, FEF2575, FIVC, Lung Age, VC.

Flow/Volume loop and Volume/Time curve.

Spirometry test interpretation.

Temperature sensor for BTPS conversion.

Inexpensive and easy to use, Minispir® light meets the requirements of integrated healthcare platforms and tablet applications.

Special edition available for POST BD test

Winspiro® light is an intuitive and efficient software, which comes standard with Minispir® light for complete diagnosis.



Pediatric Incentive Animations

Data export also via Email

Minispir® Spirometer

Technical specifications

Temperature sensor: semiconductor (0-45°C)
 Flow sensor: bi-directional digital turbine
 Flow range: ± 16 L/s
 Volume accuracy: ± 3% or 50 mL
 Flow accuracy: ± 5% or 200 mL/s
 Dynamic resistance at 12 L/s: <0.5 cmH₂O/L/s
 Communication port: USB
 Power Supply: line powered from USB port
 Dimension: 142x49.7x26 mm
 Weight: 65 gram (2.5 Oz)



Measured parameters

FVC, FEV₁, FEV₁%, FEV₃, FEV₃%, FEV₆, FEV₁/FEV₆%,
 PEF, FEF₂₅%, FEF₅₀%, FEF₇₅%, FEF₂₅₋₇₅%, FET, Vext,
 Lung Age, FIVC, FIV₁, FIV₁%, PIF, VC, IVC, IC, ERV, FEV₁/
 VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV

Minispir® Light Spirometer

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 Volume accuracy: ± 3% or 50 mL
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 Dynamic resistance at 12 L/s: <0.5 cmH₂O/L/s
 Communication port: USB
 Power Supply: line powered from USB port
 Dimension: 142x49.7x26 mm
 Weight: 65 gram (2.5 Oz)



Measured parameters

FVC, FEV₁, FEV₁%, FEV₆, PEF, FEF₂₅₋₇₅%,
 FIVC, Lung Age, VC, IVC

Minispir® Spirometer with SpO₂ option

Technical specifications

SpO₂ range: 0-99%
 SpO₂ accuracy: ± 2% tra 70-99% SpO₂
 Pulse Rate range: 30-300 BPM
 Pulse Rate accuracy: ± 2 BPM or 2%

Measured parameters

SpO₂ [Baseline, Min, Max, Mean],
 Pulse Rate [Baseline, Min, Max, Mean],
 T₉₀ [SpO₂<90%], T₈₉ [SpO₂<89%], T₈₈ [SpO₂<88%],
 T₅ [ΔSpO₂>5%], Δ Index [12s], SpO₂ Events, Pulse Rate
 Events [Bradycardia, Tachycardia]



FlowMir® disposable turbine Complies with ATS/ERS standards



Spirometry testing
 requires maximum
 accuracy and hygiene.

FlowMir® is the answer to
 both requirements.

Each turbine is factory calibrated with a computerized
 system and packaged individually.

After patient testing both the turbine and mouthpiece
 are discarded.

**The only solution to guarantee 100%
 cross contamination free testing!**



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