Micro Direct

# MicroLab

## The future of portable spirometry

Developed specifically for the professional, the next generation MicroLab employs Micro Medical's acclaimed precision Gold Standard Digital Volume Transducer which is especially suited to measuring the very low flow rates seen in patients with COPD.

The MicroLab features a high definition color touch screen that can display either a Volume/Time curve, a complete Flow/Volume loop or a child incentive graphical display.

The MicroLab can measure up to 41 spirometry parameters and has a database storage capacity for over 2,000 patients. A built-in high resolution printer quickly delivers hard copy results; and a 8.5" x 11" printout is possible via an optional Hewlett Packard printer (compatible models specified by Micro Direct).

Spida 5 PC Software is included and provides expanded data storage capabilities and trend analysis.

The versatile MicroLab spirometer offers a comprehensive range of advanced features normally only seen on expensive pulmonary labs and is shipped complete with all necessary accessories in a sturdy carrying case.

### Features

- Gold standard transducer
- Touch screen color display
- Fast on-screen text entry enabling comments
- Child Incentive Display "Bubble Gum Kid"
- Fast, quiet internal printer
- Fully customizable printout format
- Direct connect to external Hewlett Packard printers
- 41 test parameters
- 2000 Patient Test Memory
- Pre/Post Bronchodilator Comparison
- Choice of predicted values and languages
- Diagnostic interpretation and estimated lung age
- On-screen test quality prompts
- Spida 5 PC software Included
- 3-Year Parts and Labor Warranty

**Micro Direct, Inc.**
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## Specifications

Spirometry

| | |
|---|---|
| • Measurements: (forced) | VC, $FEV_{0.75}$, $FEV_1$, $FEV_3$, $FEV_6$, FVC, PEF, $FEV_{0.75}$/VC, $FEV_{0.75}$/FVC, $FEV_1$/VC, $FEV_1$/FVC, $FEV_3$/VC, $FEV_3$/FVC, $FEV_{0.75}$/$FEV_6$, $FEV_1$/$FEV_6$, $FEF_{75}$, $FEF_{50}$, $FEF_{25}$, $FEF_{25-75}$, $FEF_{50}$/VC, $FEF_{25-75}$/FVC, $FIV_1$, FIVC, PIF, $FIV_1$/FIVC, $FIF_{25}$, $FIF_{50}$, $FIF_{75}$, $FEF_{50}$/$FIF_{50}$, $FEF_{50}$/FVC, $MET_{25-75}$, FET, MVV (ind), |
| • Measurements: | EVC, IVC, IC, VT (TV), Ti, Te, Ti/$T_{tot}$, VT/Ti (TV/Ti), IRV, ERV, FR |
| • Tests per subject: | 5 relaxed VC maneuvers and 8 forced maneuvers for each baseline and two post examinations. |
| • Predicted values: | Selectable: Knudson, Crapo/Hsu, NHANES III, Polgar, Pereira, ECCS, Berglund, Austrian, Crockett, Gutierrez, Hedenstrom, Roca, Taiwan |
| • Transducer: | Micro Medical Gold Standard Bi-Directional Digital Volume |
| • Resolution: | 10 ml volume 0.03 l/s flow |
| • Accuracy: | +/- 3% to ATS recommendations—Standardization of Spirometry 1994 Update for Flows and Volume |

General

| | |
|---|---|
| • Storage: | 2000 patients with tests including Flow/Volume loops and Volume Time graphs. |
| • Printer Output: | Internal Thermal Printer or PCL Level 3 compatible HP printers (Contact customer service for a list of compatible printers) |
| • Power Supply: | Input: 100-24V AC 50-60Hz<br>Output: 12V 2.5A |
| • Battery Pack: | Rechargeable NiMH 8.4V 1Ah |
| • Dimensions: | Unit: 10” x 4.72” x 1.37” Transducer: 2” x 2.25” x 3.5” |
| • Weight: | 1.5 Pounds |
| • Temperature: | 32 to 104 degrees Fahrenheit |
| • Operating Humidity: | 30% to 90% non-condensing |
| • Storage Temperature: | -4 to 158 degrees Fahrenheit |
| • Storage Humidity: | 10% to 90% Relative Humidity |
| • Connectivity: | RS232 serial and USB 1.1 |

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The MicroLab (Cat. No. ML3500) is part of an extensive range of respiratory monitoring equipment manufactured by Micro Medical.

Micro Medical Ltd pursues a policy of continuing improvement in design, production and performance of its products. The right is there reserved to vary details at any time and without notice.