Micro Medical

The World's No.1 DiaryCard Spirometer

The Micro Medical Micro DiaryCard is an electronic data capture Spirometer, specially designed to provide a modern alternative to mechanical PEF meters and paper diary cards for objective monitoring in clinical trials. Using the Micro Medical digital volume transducer, with its proven accuracy and stability, plus an easy to use keypad entry and on screen text display, the Micro Medical Micro DiaryCard is ideal for patients to use at home. The Micro DiaryCard Spirometer can be programmed with your specific protocol requirements using the comprehensive PC based Windows software and recorded data rapidly transferred, either remotely or via a PC.

> Demonstration and full working software available on CD please contact Micro Medical Ltd

Additional New Features

- Full question display on backlit scrolling screen
- PIN number protection
- Optional quality check messages
- Measures and stores PEF, FEV1, FVC/FEV6
- Option to store flow/volume loops from recorded blows
- Universal, easy to use keypad entry
- Secure audit trail for regulatory clinical trials

Micro DiaryCard

Design Innovation

The Micro Medical Micro DiaryCard is a compact, hand-held electronic data capture Spirometer, specially designed for patient PEF and spirometry monitoring at home. Featuring the Micro Medical digital volume transducer, with its proven accuracy and reproducibility, each unit is individually calibrated to ATS 1994 standards for diagnostic devices on a waveform generator and routine calibration is not required. The tactile universal keypad and easy to read backlit graphics display, ensures ease of use by all subjects.

Easy to Use Software

The unit is supplied complete with easy to use, comprehensive PC based Windows software for clinical researchers and data managers to configure to a trial specific protocol and is activated by the subject according to the investigators' protocol, allowing any sequence of pre-determined commands to be executed at specified times. 'Blow 'commands with incentive settings and quality check messages can be



displayed on screen to encourage good, reproducible patient technique. Full symptom questions can also be viewed on a scrolling screen display and responses may be obtained using numeric, visual analogue or yes/no scoring systems. The Micro DiaryCard incorporates optional patient reminder alarm and low readings warning features.

Protected Data Retrieval

To comply with FDA requirement 21 CFR Part 11 ensuring secure data entry, the Micro DiaryCard can be PIN number protected for regulatory clinical trial requirements. Data can be retrieved via the Micro DiaryCard serial port either directly to a PC, or remotely using a modem and results can be printed directly at the investigator's site or exported into a central database.

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Specification

Measurements	PEF, FEV1, FVC/FEV6
Display	12 character by 2 line alphanumeric LCD
Resolution	10ml Volume
Volume Range	0.1 to 9.99 Litres
Flow Range	0.2 to 15.00 Litres/Second
Accuracy	+/- 3% (meets all known Spirometry standards)
Keypad	, ← , ↑, ↓, Del
Interface	RS232 input/output 4800 Baud rate
Memory	Up to 7000 Spirometry results (1500 with flow/volume loops)
Power supply	Main battery – single 9v PP3 (typical life 3 months)
	Memory battery – embedded lithium cell (minimum 7 years)
Dimensions	170mm x 60mm x 26mm
Weight	200gms (including batteries)
Software	Windows compatible



Bibliography

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The Micro Medical MicroDiaryCard is part of an extensive range of Respiratory Measurement devices manufactured by Micro Medical Ltd and is offered as Catalogue No MD02

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