MESI
Simplifying Diagnostics™

MESI mTABLET SPIRO

The most versatile digital spirometer

→ **Wireless** mode of operation for practice or home-care use

→ Pneumotachograph technology with **integrated self-calibration** for accurate measurements at any time

→ **Automatic best breath selection** with a clear and intuitive measurement review

→ **Part of the MESI mTABLET system**, providing all system functions and integration capabilities

INCENTIVE STOPWATCH

REAL-TIME ANIMATED FLOW-VOLUME CURVE

NON-FILTERED AND FILTERED MOUTHPIECES

REAL-TIME DISPLAY OF CURRENT AIR TEMPERATURE, HUMIDITY AND PRESSURE

MANEUVER QUALITY WARNINGS

MULTIPLE-PARAMETER HISTORY REVIEW

Why MESI mTABLET SPIRO

- Multiple measurement modes and parameter calculation options: **quick, primary or advanced spirometry app package**

- Automatic selection of the best of all repeated maneuvers with the **BestBreath™ detection**

- Detailed report with the ability to **switch between charts and values** for a clear interpretation

- Option to compare different measurements on the same screen through **MESI mRECORDS**

MESI mTABLET SPIRO Technical Specifications

Measurement Specifications

Quick spirometry:
Measurement mode: FEV6
Parameters: PEF, FEV1, FEV6, FEV1/FEV6

Primary spirometry:
Measurement modes: FVC, SVC*, Pre- & Post-Drug Phase
Parameters: PEF, FEV1, FEV3, FEV6, FEV1/FVC, FEV1/FEV6, EF75 (FEF75), MEF50, MEF25, MMEF, SVC*
Verification of each maneuver through on-screen quality indicators.
*available: end of May 2021

Advanced spirometry:**
Measurement modes: FVC, FIVC, FVC+FIVC, SVC, MVV, TV, Pre- & Post-Drug phase, Incentive mode
Parameters: PEF, FEV1, FEV3, FEV6, FEV1/FVC, FEV1/FEV6, MEF75 (FEF75), MEF50, MEF25, FIVC, FIV1, FIV3, FIV6, PIF, MIF75, MIF50, MIF25, MMEF, SVC, MVV, MVVFR, MVVT, TV, FR, MV

**available: July 2021

Sensor type
Pneumotach

Calibration
Automated self-calibration 1/s, based on the ambiental conditions and pre-calibrated mouthpieces

Accuracy & Reproducibility
Meets or exceeds ATS (1994), ERS (1993), and ATS/ERS (2005)

Measurement range
Volume range: 0-14 L
Flow range: +/- 14L/ sec

Quality checks
ATS Acceptability and ATS Reproducibility checks

Power & Battery
High-power rechargeable Lithium-Polymer battery
Capacity: 620 mAh
Examinations per battery charge: >150
Continuous use: >4h
Charge time for depleted battery:
Approximately 1 hour (minimum charge time for a complete measurement using the FVC mode: 10 minutes)
Input: 100-240V AC/50-60Hz/350mA
Output: 5V DC/5.0A

Charging Station
Dual purpose of the charging station: safe storage of the module between measurements and fully charged device at all times.
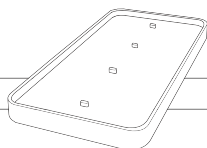Width: 400 mm
Depth: 200 mm
Height: 38 mm
Weight: 675 grams
Positioning types:
Desk, wall mount or trolley

Module Dimensions
Width: 40mm (1.57 inches)
Depth: 40mm (1.57inches)
Height: 140mm (7.05 inches)
Weight: 220 grams

Smart Data Management
Secure report access with the out-of-the-box platform - MESI mRECORDS
MESI mPRINT service for secure printout through the internal network, direct .pdf storage on a local computer
Worklist integration for: DICOM, HL7, XML, GDT, JSON
Full custom integration upon request

Protection Classification
Type of protection against electric shock: Class II
Medical device classification: Class IIa
Applied parts: CF
RF emissions (CIPSR 11): Group 1, Class B
Ingress protection: IP30

Applied Standards
EN 60601-1 General requirements for Safety
EN 60601-1-2 Electromagnetic compatibility - Requirements and tests
EN ISO 26782 Anaesthetic and respiratory equipment — Spirometers intended for the measurement of time forced expired volumes in humans

Operating Conditions
Temperature, operating: 10° to 40°C
Relative humidity: 25 to 85% (no condensation)
Pressure during operation: 700 to 1060 hPa
Warm up period of 5 minutes

Transport & Storage Conditions
Temperature:
-15° to 50°C (<1 month)
-15° to 40°C (<3 month)
-15° to 25°C (<12 month)
Relative humidity: 25 to 85% (no condensation)

MESI mTABLET Technical Specifications
Operating System: MESI OS
Processor: CPU Quad ARM Cortex A53 @ up to 1.2GHz per core
Barcode reader: 1D/2D barcode imager
Screen: 1280 x 800 px IPS
Storage: 8 GB
RAM: 1 GB
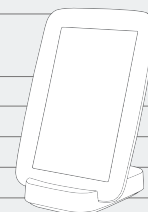Connectivity: Wi-Fi 802.11b/g/n and 2.4 GHz single band Bluetooth 4.1
Camera: 5 MP
Environment: IP2x, 90 cm drop resistant
Audio: Mono speaker
Security: 2 step authentication, user password or PIN
Battery operation: more than 8 hours of continuous use

No.1 Leading provider of Ankle-Brachial Index measuring technology

Worldwide presence

European production and development

ISO 9001   Q-1664
ISO 13485   M-049

CE 1304, ISO 9001 and
ISO 13485 certified

CE 1304