

# 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: PIF, FIVC, SVC, IVC, IC, EC, IRV, ERV, TV, MVV, FR

Verification of each maneuver through on-screen quality indicators.

### Advanced spirometry:

Measurement modes: FVC, FIVC, FVC+FIVC, SVC, MVV, TV, Pre- & Post-Drug phase, Incentive mode (animation)

Parameters: EU-PEF, PEF, FEV0.5, FEV1, FEV6, FEVC, FEV25, FEF50, FEF75, FEV25-75, FET, VEXT, VC, FEV1/FEV6, FEV1/FVC, FEV1/VC, PIF, FIVC, SVC, IVC, IC, EC, IRV, ERV, TV, MVV, FR

## 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 (2019)

## 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

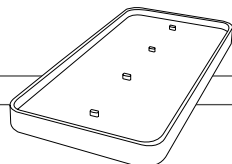
Depth: 200 mm

Height: 38 mm

Weight: 675 grams

Positioning types:

Desk, wall mount or trolley



## Module Dimensions

Width: 40mm (1.57 inches)

Depth: 40mm (1.57 inches)

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: B

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

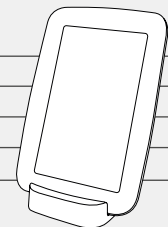
Camera: 5 MP

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



MESI, Ltd  
Leskoškova cesta 11a  
1000 Ljubljana, Slovenia, EU

f MESIdoo

MESImedical

in MESI



European production and development



Worldwide presence

FDA

Food and Drug Administration cleared



EU Medical Device Regulations compliant



ISO 9001 Q-1664  
ISO 13485 M-049

ISO 9001 and ISO 13485 certified



MDSAP compliant

www.mesimedical.com

E: info@mesimedical.com  
T: +386 1 620 34 87