



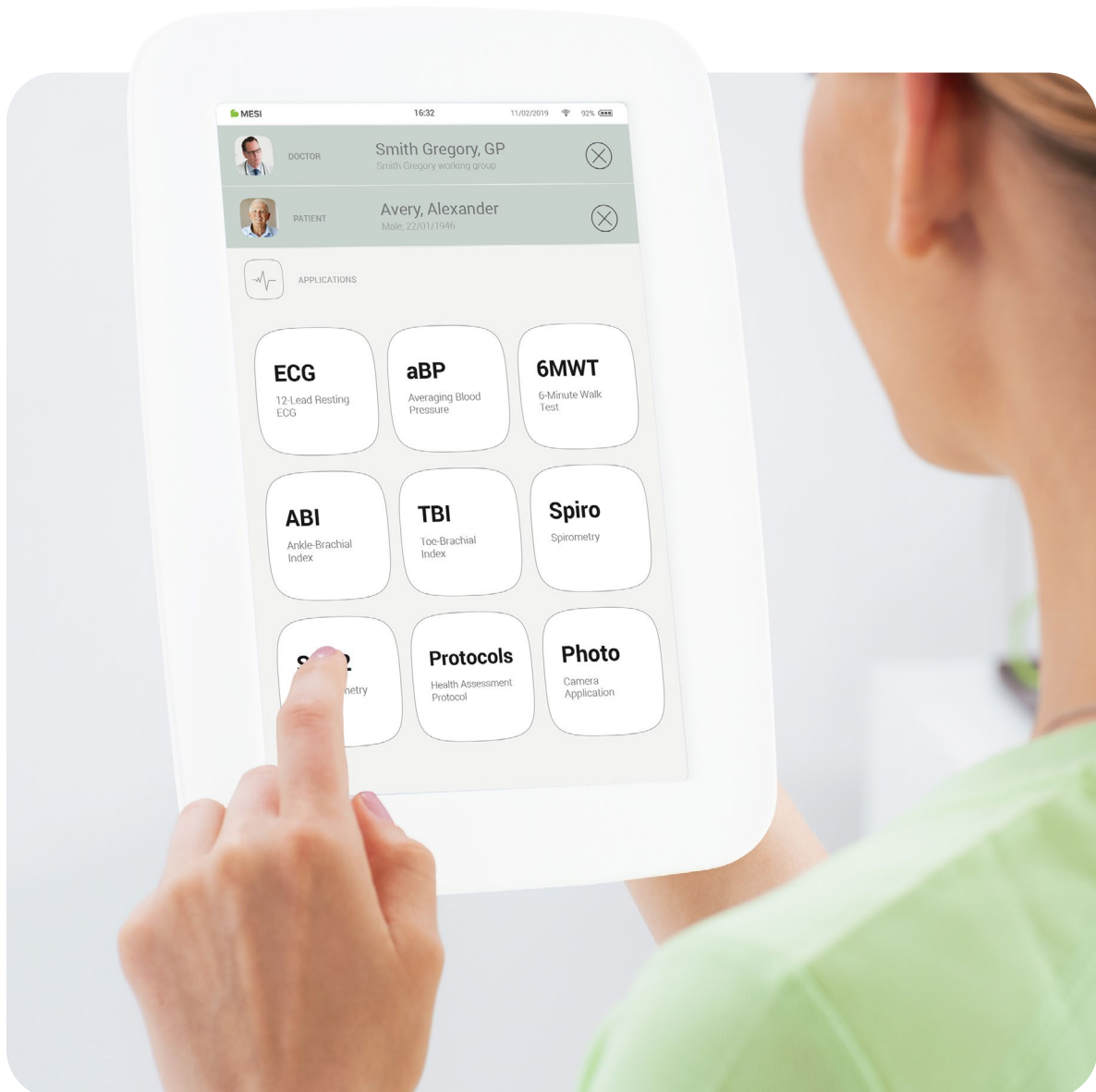
# MESI

Simplifying Diagnostics

All diagnostic measurements.  
All patient records.  
**One system.**

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## MESI mTABLET



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# A whole new approach to integrated diagnostics



The **MESI mTABLET** enables fast and easy digitalisation of the healthcare system. It helps clinicians provide their patients with the best medical assessment by combining **diagnostic measurements, patient records, and clinical tools**. The diagnostic measurement results can be instantly shared with a GP or specialist for a second opinion.

With its wireless, modular approach, the MESI mTABLET streamlines workflows across different clinical applications, from arterial assessment and vital signs to comprehensive office diagnostics. It enables **unified user experience, single-setup connectivity**, and provides **decision-making support** to improve efficiency and patient outcomes.

All measurement reports and patient data are automatically stored in the patient record. The information can be reviewed on a computer, through the practice's information system, or on the **built-in MESI mRECORDS platform**, providing secure access from any web-enabled device.

ANKLE-BRACHIAL INDEX

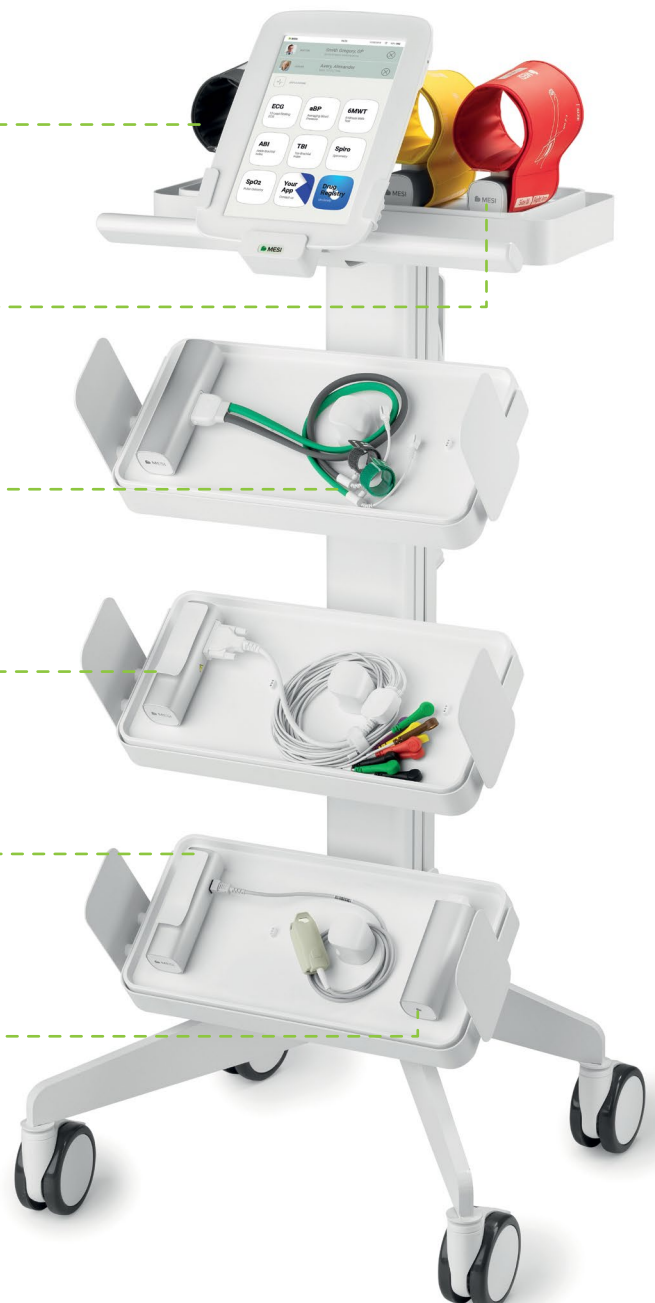
BLOOD PRESSURE

TOE-BRACHIAL INDEX

12-LEAD ECG

PULSE OXIMETRY

SPIROMETRY



Performance and functionality can be personalised with numerous extensions available in the **medical marketplace – MESI mSTORE**.

# Wherever Your Work Takes You, the **MESI mTABLET** System Follows

There is no need to change the way you go about your daily tasks: the **MESI mTABLET** system adapts to your particular healthcare setting.

Whether you are a part of a **smaller practice**, a **walk-in clinic**, a **multi-level hospital** environment, or provide the patients with **home care visits**: the MESI mTABLET can be used anywhere, without limitations. It supports you throughout your day and helps you **work smarter, not harder**.

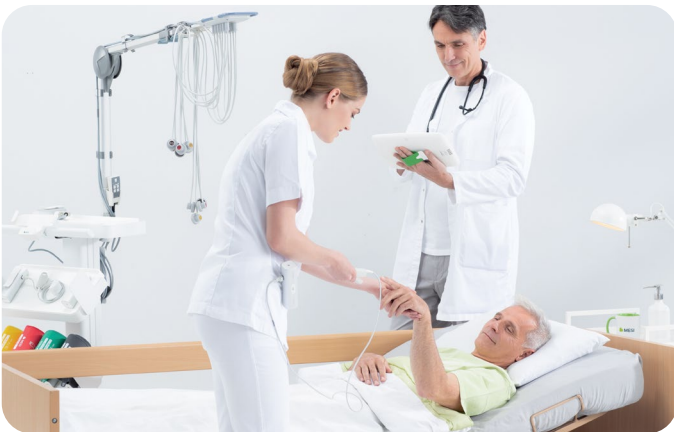
## Office diagnostics



**Configure your system according to your needs** and set it up with little training. You can have a complete overview of all the measurements in real time or at any point during your day, accessible on any web-enabled device.

Need a second opinion? The MESI mTABLET's share button ensures the consulting specialist receives the full report without any sensitive patient information.

## Vital signs



Keep all your team members in the loop through working groups and ensure the same level of care for all your patients by building custom protocols. All diagnostic procedures are fast and objective and all reports are automatically stored in the patient records.

**The unified user experience for every single measurement** helps strengthen not only your relationships with your patients, but also your coworkers.

## Arterial assessment



**Pack the MESI mTABLET and the modules into your bag and carry it with you** — the battery will last all day. Perform the necessary measurements, take photos of skin conditions to monitor the healing progress and add relevant comments.

Share the reports for a second opinion or review them on the built-in MESI mRECORDS platform.



# Medical Device For a Modern Practice

Choose diagnostic modules according to your practice's needs

## MESI mTABLET ECG

# First Completely Digital Electrocardiogram

The wireless and portable MESI mTABLET ECG is a powerful diagnostic device for advanced analysis and collaboration anytime, anywhere.

- > **Wireless**, digital 12-lead ECG measurement
- > **Result sharing** for an immediate second opinion
- > Advanced analysis options with **MESI mRECORDS**

SAVE DIRECTLY  
INTO EHR



VARIOUS PATIENT  
CABLES AVAILABLE



WIRELESS &  
PORTABLE



SHARE FOR A  
SECOND OPINION





## Why MESI mTABLET ECG?

- 12-lead wireless ECG
- Glasgow Interpretation Algorithm included
- ECG signal filters (MESI signal enhancement, highpass, low-pass, mains, myogram)
- 8 advanced view options
- Recording speed and sensitivity settings
- Simple zoom-in, comment adding and advanced analysis with event tagging
- Customisable printout directly from the MESI mTABLET
- Excellent mobility (bag or trolley): bring the ECG to the patient, not vice versa

## Application extensions

The **MESI mTABLET ECG** is not only an advanced electrocardiogram. By adding new smart applications, you can extend the use and make it your lifetime associate. This makes it a truly new concept of a medical device.

### ECG

12-Lead Resting ECG

### Protocol

Health Assessment Protocol

### Worklist

Patient Worklist

### Photo

Camera



# The Smartest Wireless Ankle-Brachial Index

Automated wireless Ankle-Brachial Index system with its 3CUFF™ technology allows simultaneous measurement of the brachial and ankle pressures.

- **PADsense™ algorithm** for detection of severe Peripheral Arterial Disease
- **3CUFF™ technology** permits simultaneous measurement
- 1-minute, easy and reliable ABI measurement with **pulse waveform interpretation**

SAVE DIRECTLY  
INTO EHR



MULTIPLE  
CUFF SIZES



3CUFF™  
TECHNOLOGY



PAD

PADsense™  
ALGORITHM



SHARE FOR A  
SECOND OPINION







## Why MESI mTABLET ABI?

- SmartArm™ detection – to determine the higher blood pressure of the two
- Automated, 3-cuff simultaneous measurement
- Multiple cuff sizes and ability to mix-and-match different size cuffs during one measurement
- Pulse waveforms and oscilation graphs
- Advanced review and alerts, thanks to PADsense™ algorithm

## Application extensions

The **MESI mTABLET ABI** is not only an advanced Ankle-Brachial Index measuring device. By extending the use with smart applications, such as the BP app or the Photo app, you can measure blood pressure or track the healing of skin conditions in a matter of clicks, using the same device.

### BP

Arm Blood Pressure

### aBP

Averaging Blood Pressure

### DBP

Dual Blood Pressure

### aDBP

Averaging Dual Blood Pressure

### PWV

Pulse Wave Velocity

### Photo

Camera



## MESI mTABLET TBI

# The Simplest Wireless Toe-Brachial Index

The MESI mTABLET TBI is used for detecting PAD in patients where an Ankle-Brachial Index measurement alone is not sufficient due to non-compressible arteries.

- Quick and reliable TBI measurement with **pulse waveform interpretation**
- Simple 1-step automated TBI measurement **performed in 1 minute**
- **AdaptiveLED™ PPG probe** detects skin thickness for increased accuracy

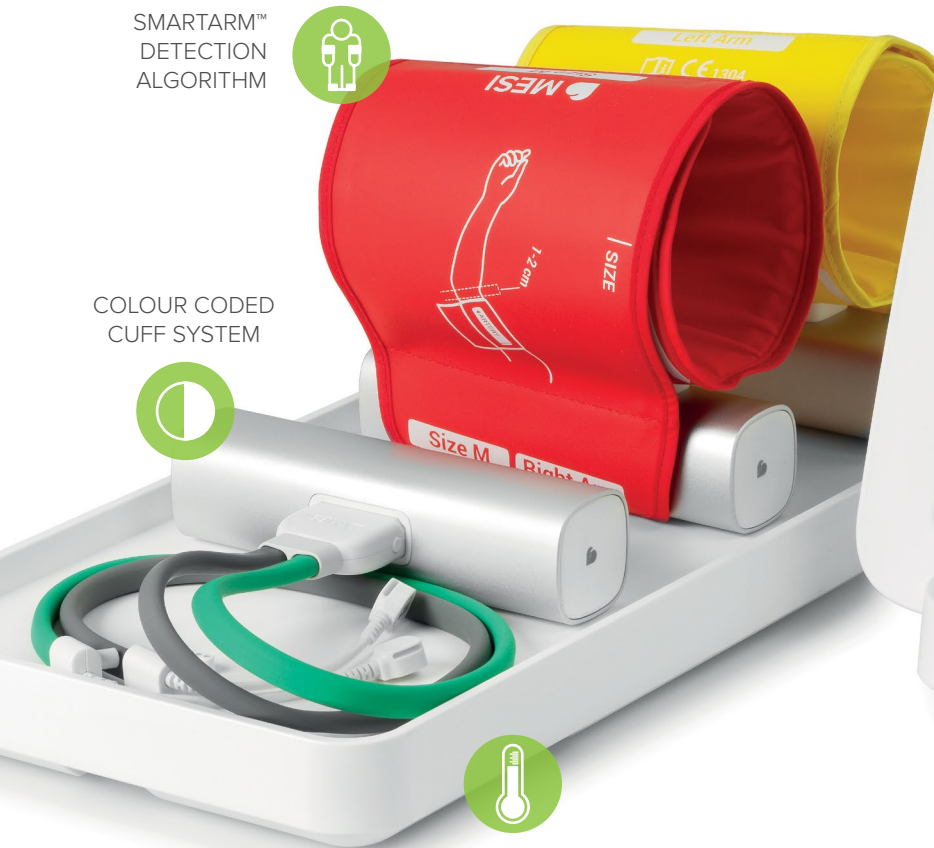
SAVE DIRECTLY  
INTO EHR



SMARTARM™  
DETECTION  
ALGORITHM



COLOUR CODED  
CUFF SYSTEM



INTEGRATED SKIN  
TEMPERATURE  
SENSOR



SHARE FOR A  
SECOND OPINION







## Why MESI mTABLET TBI?

- > Simultaneous measurements in arms and toes. Adaptive infrared LED PPG light detects toe skin temperature and thickness
- > FirstWave™ algorithm for detecting the first returning pulse waveform in the toes
- > Comprehensive TBI report with pulse waveforms and oscillation graphs for the arms and PPG pulse waveforms for the toes

## Application extensions

The **MESI mTABLET TBI** is not only an advanced Toe-Brachial Index measuring device. By adding smart applications such as DBP (Dual Blood Pressure), you can effectively determine the interarm difference and uncover other potential cardiovascular risks, such as for coronary artery disease (CAD). Expand the use of your diagnostic system whenever you require new measurements!

### TBI

Toe-Brachial Index

### BP

Arm Blood Pressure

### aBP

Averaging Blood Pressure

### DBP

Dual Blood Pressure

### Protocol

Health Assessment Protocol



# The Most Versatile Digital Spirometer

Streamline your pulmonary assessment with multiple measurement modes, diverse parameter calculation options and instant comparison with the patient's previous results.

- > Wireless mode of operation **for practice or home visit use**
- > Pneumotachograph technology with **integrated self-calibration** for accurate measurements at any time
- > **Automatic or manual best breath selection** with a clear and intuitive measurement review

INCENTIVE  
STOPWATCH



SAVE DIRECTLY  
INTO EHR



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



MANEUVER QUALITY  
WARNINGS



NON-FILTERED AND  
FILTERED MOUTHPIECES



REAL-TIME ANIMATED  
FLOW-VOLUME CURVE



## Why MESI mTABLET SPIRO?

- 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 with MESI mRECORDS

## Application extensions

The **MESI mTABLET SPIRO** is not only a versatile digital spirometer. Multiple measurement modes and parameter calculation options (quick, primary or advanced) make it an indispensable tool for diagnosing asthma, chronic obstructive pulmonary disease (COPD) and other conditions that affect breathing.

### FEV6

Quick spirometry application

### Spiro

Primary spirometry application

### Spiro+

Advanced spirometry application

### Protocol

Health Assessment Protocol

### Photo

Camera



## MESI mTABLET SPO2

# The Most Flexible Pulse Oximeter

The MESI mTABLET SPO2 is a wireless pulse oximeter system for screening, diagnosing or monitoring acute respiratory or heart illness.

- > **An intuitive user interface** with quickly adjustable operating modes
- > Large screen with **high visibility of SpO2 levels and heart rate**
- > More than **8000 measurements** per single battery charge

SAVE DIRECTLY INTO EHR



ADDITIONAL MEASUREMENTS AND APPS



MONITOR FUNCTION



WIRELESS & PORTABLE



AUDIBLE AND VISUAL ALARMS



SHARE FOR A SECOND OPINION





## Why MESI mTABLET SPO2?

- > Real-time audible and visual alarms
- > High performance even with low perfusion
- > Multiple measurement options

## Application extensions

The **MESI mTABLET SPO2** is not only an advanced pulse oximeter. By adding other smart applications, such as the 6MWT (6-Minute Walk Test), you can easily assess functional capacity in patients with a wide range of pulmonary, cardiovascular, neurological, and neuromuscular conditions.

### SpO2

Pulse Oximetry

### 6MWT

6-Minute Walk Test

### Photo

Camera

### Protocol

Health Assessment Protocol





# Revolutionised Office Blood Pressure

Bring high precision to the healthcare environment with a digital blood pressure monitor for fast and accurate readings.

- > First wireless arm cuff supporting **multiple cuff sizes**
- > One arm cuff, **several operating modes**
- > **Advanced analysis options** with pulse waveforms

SAVE DIRECTLY  
INTO EHR



ADDITIONAL  
MEASUREMENTS  
AND APPS



WIRELESS &  
PORTABLE



SMART SIZE  
DETECTION







## Why MESI mTABLET BP?

- Precise measurement of BP with additional software extensions
- Wireless operation with easily exchangeable cuffs in multiple sizes
- Isolation of pulse waveforms with the help of digital filters
- Clear display of pulse waveforms

## Application extensions

The **MESI mTABLET BP** is not only an advanced blood pressure monitor. Add new measurements whenever you need them! The aBP (Averaging Blood Pressure) application lets you take multiple blood pressure readings, which helps you detect masked hypertension and reduce overtreatment of white coat hypertension.

### BP

Arm Blood Pressure

### aBP

Averaging Blood Pressure

### Photo

Camera

### Protocol

Health Assessment Protocol



## MESI mTABLET Thermometer

# Non-Contact and Contact Thermometer in One

Perform contactless and diverse contact temperature measurements without manual data entry.

- > Fast and easy-to-use **contactless forehead option**
- > **Contact thermometer** for specialised measurements and/or confirmation
- > **Advanced analysis options** with patient history

VIEW, SAVE OR DISCARD RESULTS ON MEDICAL-GRADE TABLET

WIRELESS & PORTABLE



DISTANCE ALIGNMENT TOOL

ARMPIT, RECTAL OR ORAL MEASUREMENTS



SAVE DIRECTLY INTO EHR

SHARE FOR A SECOND OPINION



## Why MESI mTABLET Thermometer?

### NON-CONTACT FOREHEAD THERMOMETER

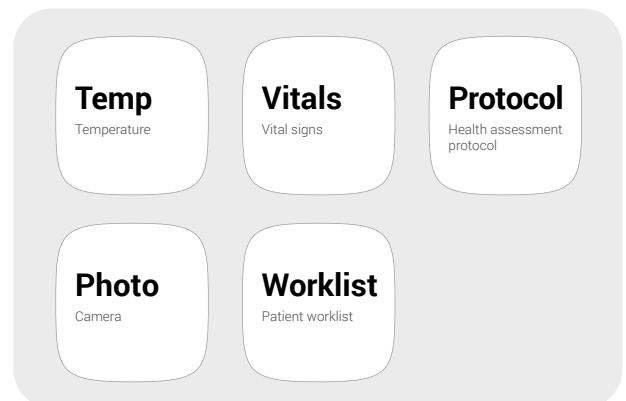
- > Measured temperature from 34.0 °C to 42.0 °C
- > Automatic distance alignment tool
- > Colour result indicator for immediate feedback
- > Minimum cross-contamination risk
- > Smoother and less invasive process with less distress for the patient
- > No disposable probe covers needed – enhanced sustainability and lower total cost of ownership

### CONTACT THERMOMETER

- > Measured temperature from 34.0 °C to 42.0 °C
- > Armpit, oral or rectal measurements
- > Disposable contact probe shields for reduced cross-contamination risk

## Application extensions

The **MESI mTABLET Thermometer** is not only an advanced temperature-measuring device. You can also use it within the MESI mTABLET VITALS (with heart rate, blood pressure and SpO2) for complete assessment of vital signs. By adding smart apps like Protocol, you can also make temperature a part of custom protocols at your practice.



## MESI mTABLET VITALS

# Intelligent spot check vital signs ecosystem

Simultaneously measure key vital parameters and save them automatically on one device.

- > Wireless, connected diagnostic tools: **BP, SPO2, thermometer** (contactless + contact)
- > **NEWS2 S1** Early Warning Score
- > Manual parameters: **respiratory rate, pain, ACVPU**

VIEW, SAVE OR DISCARD RESULTS ON MEDICAL-GRADE TABLET

SHARE FOR A SECOND OPINION

SYS, DIA, MAP

2-IN-1  
THERMOMETER

SPO2,  
HEART RATE

WIRELESS &  
PORTABLE

SAVE DIRECTLY  
INTO EHR







## Why MESI mTABLET Vitals?

### VITAL SIGNS PARAMETERS MEASURED ON ONE DEVICE

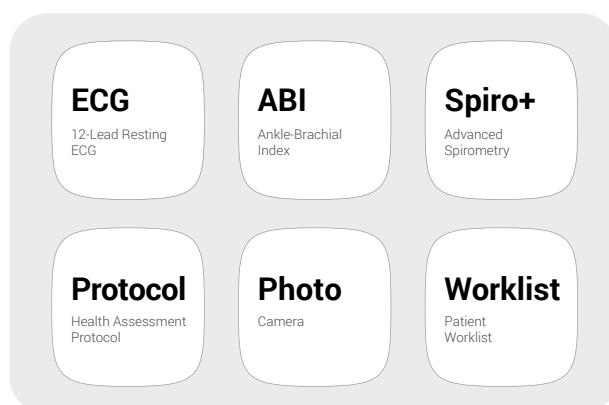
- > **Automated blood pressure, SpO2 and temperature.** Contactless and contact (oral, rectal, axillary) thermometer
- > Manual entry of **respiratory rate, pain and ACVPU** with a **slide button** for excellent time savings
- > Automated **NEWS2 S1 Early Warning Score** calculation with warnings

### CONNECTIVITY

- > **Wireless** diagnostic modules with 11" medical tablet
- > **Less administration** with immediate storing into the patient's digital file
- > **Reduced human and clerical errors** due to automated data entry

## Application extensions

The **MESI mTABLET VITALS** is not only an advanced spot checking device. You can also expand it with other diagnostic tools (e.g. 12-lead resting ECG, spirometry, ABI, Photo app for wound management) for streamlined assessment at one or different departments. By adding the Protocol app, you can build protocols in 5 minutes for maintaining high-quality, standardised patient care.



# Applications Tailored to Your Practice's Needs

Add measurements and applications whenever necessary



# Create and Follow Protocols on the **Protocol App**

A one-stop tool to access diverse patient assessment protocols, create original ones, implement them across your organisation and share them with the medical community.

You can view the available protocols in the **Protocol Store**. It allows you to browse through protocols, download them and also share your original protocols for public use.

- > **Standardised assessment**, e.g. for patients with the same condition or preventive exams
- > **Enhanced level of care** and patient outcomes
- > **Clear audit trail** and real-time review

SIMPLE  
CREATION AND  
OPTIMISATION



WIDE  
RANGE OF  
INPUTS



EASY  
SHARING  
AND PRINTING



MESI 01:24 PM 22/05/2019 87%

**Protocol** DOCTOR Smith Gregory, GP PATIENT Avery, Alexander

< > ↺ ↻ 📄 🗑️ DONE

22/05/2019, 01:26 PM

**General health status protocol**

Protocol status: **In progress** Phases complete: **2/4** **EDIT**

**Questionnaire** Gaber Jelka

General information

1. Height: 173 cm

2. Weight: 62 kg

Show more

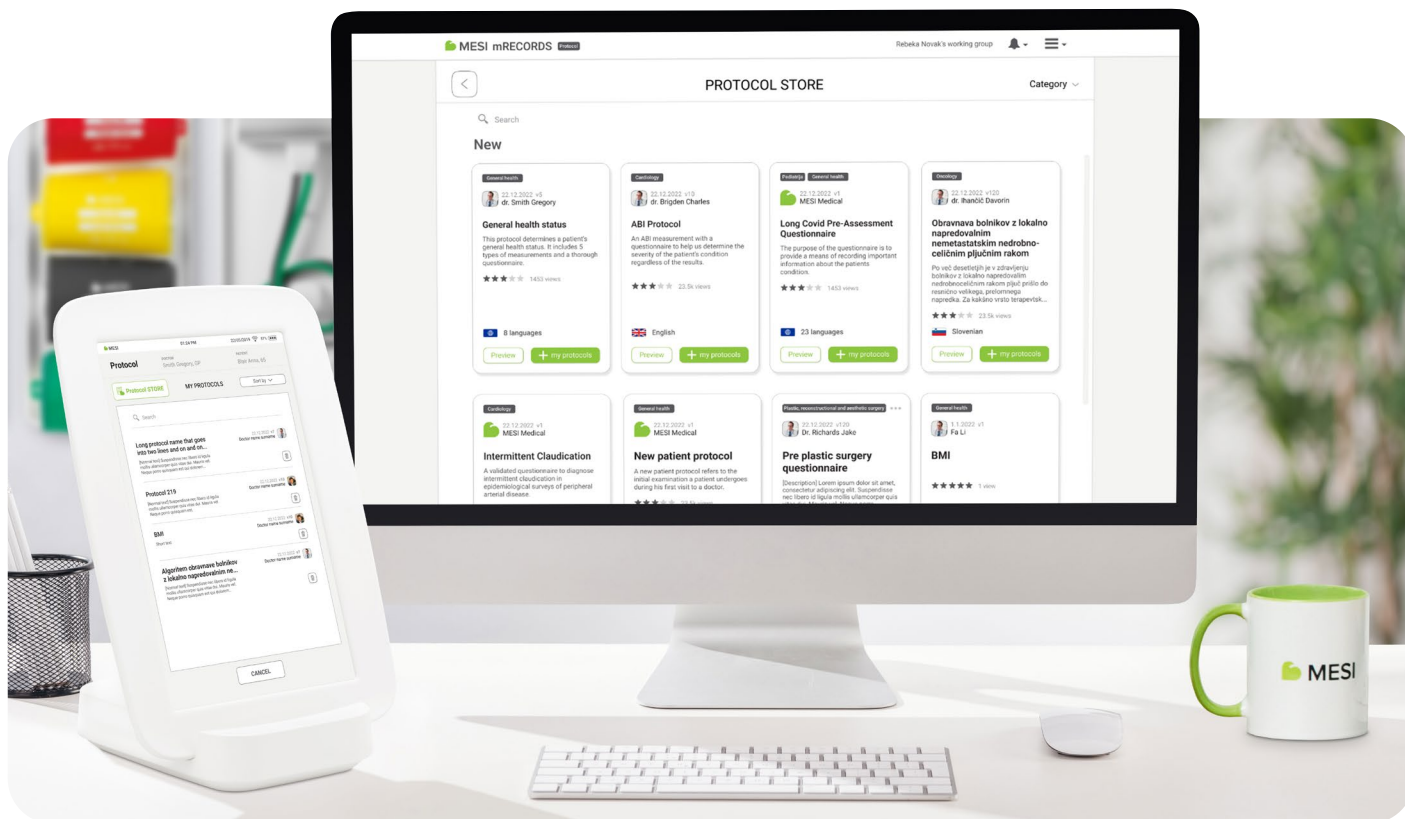
**Measurement** Unfinished phase

12-lead resting ECG

**Measurement** Smith Gregory, GP

Averaging Blood Pressure

	Avg. Sys	Avg. Dia	Avg. MAP	Heart rate
Right arm	129 mmHg	75 mmHg	75 mmHg	72 bpm



## How it works

Two versions of the Protocol app are available. The **Basic Protocol** version is a part of every MESI mTABLET system, but with limited functionality. The **Full Version** is available upon inquiry and enables unlimited use.

**BASIC PROTOCOL** app is free of charge. It allows access to the Protocol Store, where the user can browse all protocols and download free ones (created by MESI). They can then be used on the MESI mTABLET or MESI mRECORDS, shared with the user's working group and shared for a second opinion as reports.

### Long Covid Pre-Assessment Questionnaire

22.12.2022  
MESI medical

The purpose of the questionnaire is to provide a means of recording important information about the patients condition.



### Intermittent Claudication

17.10.2022  
MESI medical

A validated questionnaire to diagnose intermittent claudication in epidemiological surveys of peripheral arterial disease.



### New patient protocol

1.2.2022  
MESI medical

A new patient protocol refers to the initial examination a patient undergoes during his first visit to a doctor.



**FULL VERSION** is available upon inquiry and offers unlimited use. The user can not only download and use all protocols available in the Protocol Store (also those by other clinicians), but also create original protocols. The original protocols can then be shared with colleagues and published in the Protocol store to make them available to all MESI mTABLET users.

### Pre- and post-surgery protocol with follow up questionnaire

22.12.2022  
dr. Smith Gregory

A protocol that allows us to monitor the patient's condition throughout all phases before and after surgery.



### ABI Protocol

22.12.2022  
dr. Brigden Charles

An ABI measurement with a questionnaire to help us determine the severity of the patient's condition regardless of the results.



### New patient protocol

1.2.2022  
MESI medical

A new patient protocol refers to the initial examination a patient undergoes during his first visit to a doctor.



### General health status

22.9.2022  
dr. Smith Gregory

This protocol determines a patient's general



# Assess Cardiovascular Risk with SCORE2

A risk prediction algorithm to estimate 10-year risk of CVD, developed by the European Society of Cardiology. It is integrated in the MESI mTABLET system as an essential prediction model.

SCORE2 is calculated based on the **age, sex, country, systolic blood pressure, non-HDL cholesterol, and smoking status** of the patient.

- > **A free feature** of every MESI mTABLET
- > **A risk prediction algorithm** to estimate 10-year risk of CVD
- > Applicable for Europe as well as some Asian and African countries

AUTOMATIC  
SELECTION  
OF SCORE2  
OR SCORE2-OP



AUTOMATIC  
SAVING INTO  
PATIENT'S  
PROFILE



WIDE  
RANGE OF  
INPUTS



The screenshot displays the MESI mTABLET interface. At the top, it shows the doctor's name, Smith Gregory, GP, and the patient's name, Avery, Alexandra J., with a SCORE2 value of 14. Below this, there are tabs for Archive, Charts, and Profile. The Profile tab is selected, showing patient details for Avery, Alexandra Jane, Female, 22/01/1940 (82). The patient's address, phone number, email address, patient ID, race, and smoking status are listed. A large orange box displays the SCORE2-OP calculation, showing a 14% High risk. The calculation is valid for patients with no previous cardiovascular event or type 2 diabetes. The inputs for the calculation are: Country (France), Age (82), Sex (Female), BP (150/95), non-HDL (5.7), and Smoking (NO). Below the calculation, there is a History section with a dropdown arrow. The Vital patient data section shows Height (175 cm), Weight (70kg), and BMI (22.9).

Input	Value
COUNTRY	France
AGE	82
SEX	Female
BP	150/95
non-HDL	5.7
SMOKING	NO

Vital patient data	Value
Height	175 cm
Weight	70kg
BMI	22.9

# Why you should use SCORE2

SCORE2 enables **better and faster review of the health status and cardiovascular risk** of patients in the MESI mTABLET system, ensuring quality patient management.



SCORE2  
Patient 1



SCORE2  
Patient 2



SCORE2  
Patient 3

	<50 years	50-69 years	≥70 years
●	<2.5%	<5%	<7.5%
●	2.5-7.5%	5-10%	7.5-15%
●	≥7.5%	≥10%	≥15%

Based on its results, healthcare professionals can **effectively manage CVD prevention**.

In addition to the risk assessment, they can obtain **important information about the patient's health condition** and possible recommendations.

## Assess cardiovascular risk effectively

MESI mTABLET SCORE2 is a free MESI mTABLET feature that automatically calculates SCORE2 or SCORE2-OP for each patient aged 40 and over. The calculation is automatically suggested by the MESI mTABLET for each patient of that age. It helps clinicians identify patients who need more attention with further diagnostic measurements due to higher cardiovascular risk.



## Obtain a comprehensive health overview

SCORE2 is calculated on the basis of age, sex, country, systolic blood pressure, non-HDL cholesterol and smoking. You can also enter additional patient data for advanced health status insight. If some (or all) vital patient data is missing for the calculation, the system suggests that the medical professional should enter it and that the necessary diagnostic measurements like blood pressure should be performed. This is also the case when a new profile is created for a patient aged 40 or more.

## Score results at your fingertips

After entering the data, the calculated score is displayed on the patient's SCORE2 screen, highlighting all the factors used in the calculation. The SCORE2 status is also visible in the patient list as well as in the doctor's archive and the patient's profile.

## Accurate and Fast Spirometry Whenever you Need It

- > **Fast and accurate** measurement of the most important spirometry parameters
- > **Automated** breath detection and maneuver termination

ENHANCED VISUAL DISPLAY OF FLOW-VOLUME CURVE AND PARAMETERS



### FEV6

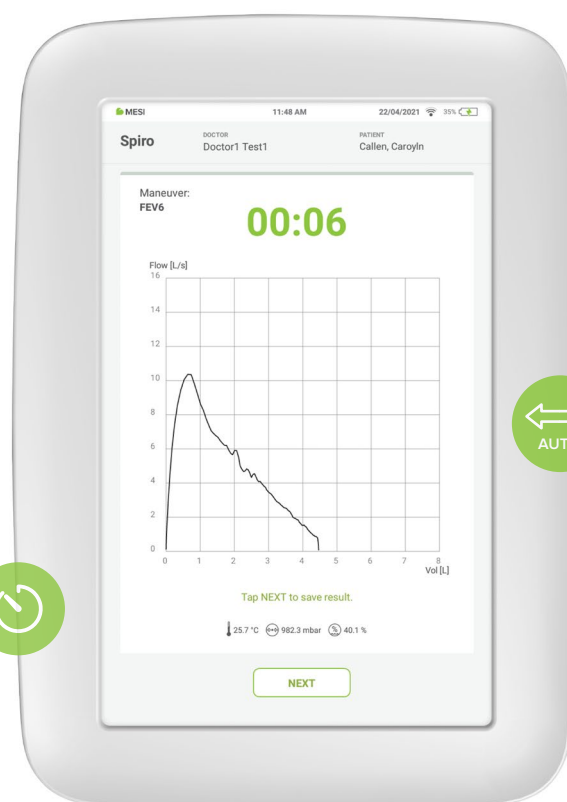
Quick Spirometry Application

BASIC RESULTS ANALYSIS

## Comprehensive Spirometry Package for Primary Healthcare

- > **FEVC and basic SVC** measurement modes
- > **Pre- and post-measurement** modes (bronchodilator test)
- > Pneumotacograph technology with **automated self-calibration**

ENHANCED COMPARISON OF PRE- & POST-MEASUREMENTS



### Spiro

Primary Spirometry

FULL SPIROMETRY INTERPRETATION & BREATH QUALITY SUMMARY

# Diagnostic Spirometry for Every Pulmonology Practice

As the most versatile digital spirometer for specialists, this diverse tool enables a comprehensive assessment of a patient's health, beyond diagnosing possible pulmonary issues.

## Spiro+

Advanced Spirometry Application

- > **Advanced measurement modes**, including FVC, FEVC and VCE
- > **Enhanced history graph with MESI mRECORDS**: multiple-measurement history review
- > **Volume-time** graph and **VT6** graph

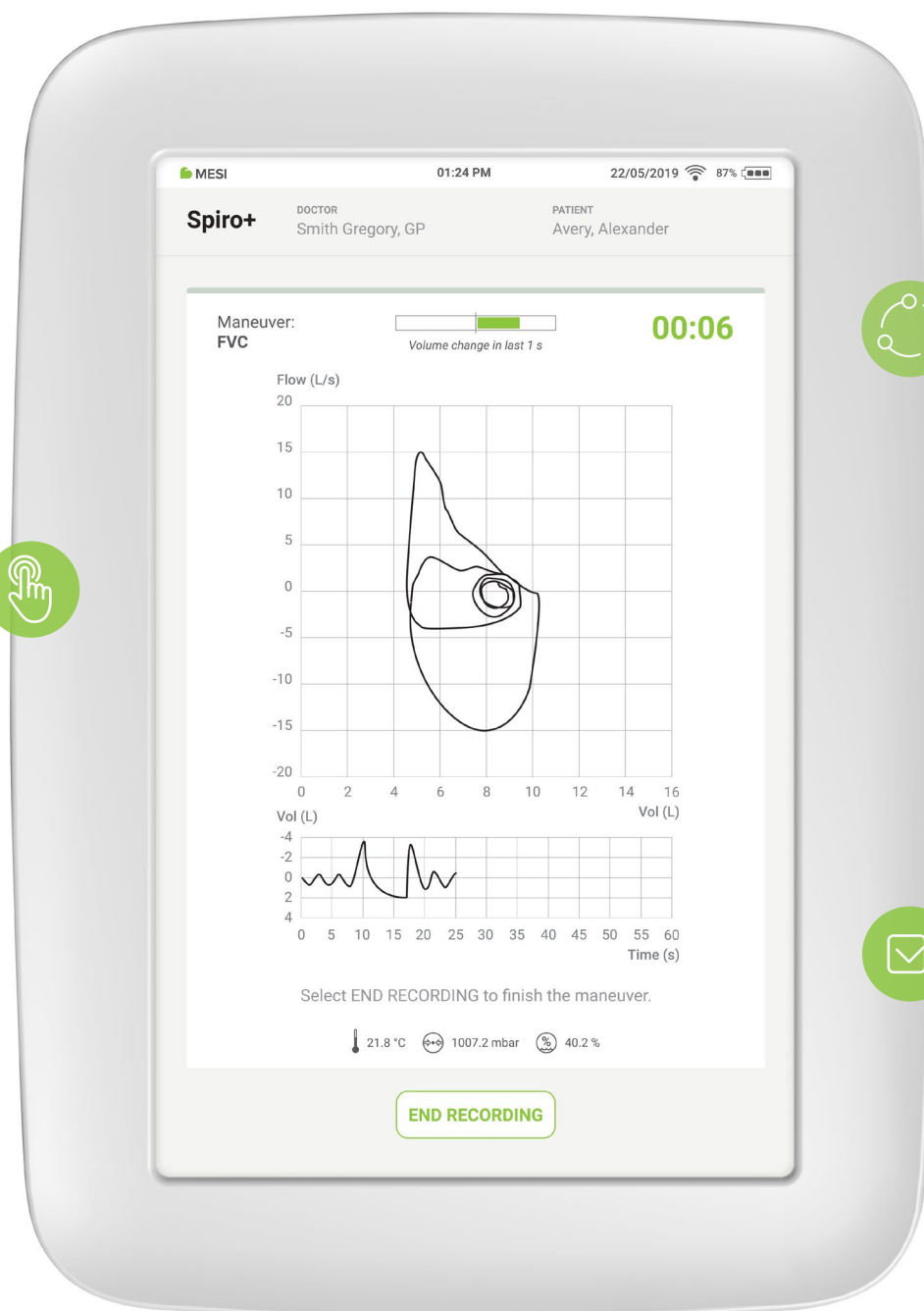
FLOW-VOLUME AND VOLUME-TIME CURVES DISPLAY



FULL-LOOP SPIROMETRY (INHALE & EXHALE)



INCENTIVE ANIMATION MEASUREMENT MODE





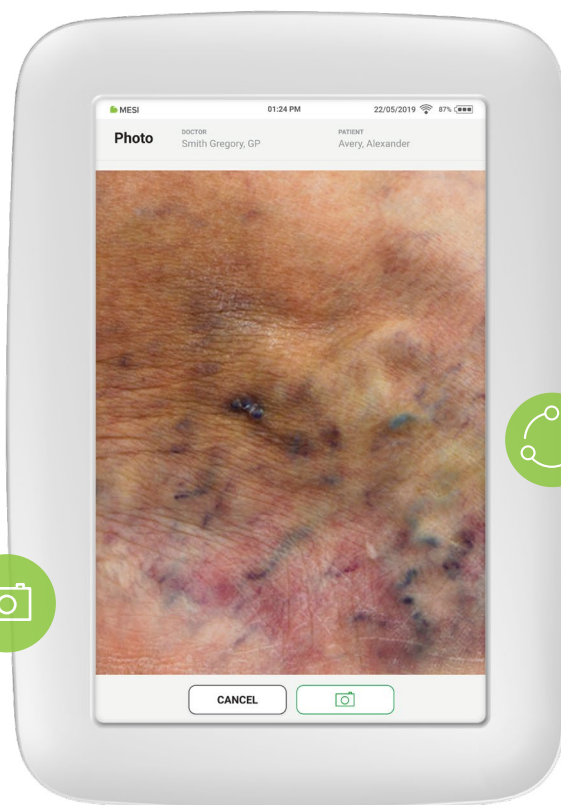
## Monitor Wounds and Other Skin Conditions with the Photo App

### Photo

Camera Application

- Document and archive in seconds – **the mTABLET is all you need**
- **Store** the results **automatically** and **easily follow** the treatment progress with all photos in one place

5 MP CAMERA



SHARE FOR A SECOND OPINION

## Patient-specific Average Blood Pressure Measurement with the aBP App

### aBP

Averaging Blood Pressure

- **Accurate sequential BP** measurement with the MESI mTABLET BP
- **Customisable parameters** (number of sequential measurements, initial delay and intervals, etc.)
- **Reference scale** with gathered results of all readings

OBP30 MONITORING

30 MIN



AUDIO INDICATORS



AVERAGE SYS, AVERAGE DIA AND MAP

## Determine the Interarm Difference in One Step with the DBP App

- > **Simultaneous** measurement in both arms
- > All measurements are **automatically saved** in MESI mRECORDS
- > **Multiple cuff sizes** for increased accuracy

ADJUSTABLE  
OPERATING  
MODES



### DBP

Dual Blood Pressure



MOTION AND  
SMART SIZE  
DETECTION



COLOUR-CODED  
RESULTS AND  
REFERENCE SCALE

## Customisable Dual Average Blood Pressure Measurement with the aDBP App

- > Sequential simultaneous BP measurement **in both arms**
- > **Determination of interarm difference** and other potential cardiovascular risks

FULLY  
CUSTOMISABLE  
MEASUREMENT



### aDBP

Averaging Dual Blood Pressure



BETWEEN 2 AND  
10 READINGS IN A  
SEQUENCE



FULLY  
AUTOMATED  
MEASUREMENT

# Advanced **Arterial Age Assessment** with the PWV App

PWV is an integrative biomarker and has been extensively studied as an independent predictor of CV morbidity and mortality due to vascular ageing.

## PWV

Pulse Wave Velocity

- > Quick, **2-in-1 measurement** of arterial stiffness and Ankle-Brachial Index
- > Accurate measurement of arterial stiffness requiring **no technical expertise**
- > Reference values according to the **European Arterial Stiffness Collaboration Group**

AORTIC STIFFNESS ASSESSMENT

MEASUREMENT OF BRACHIAL-ANKLE PWV

FULLY AUTOMATED NON-INVASIVE TEST



# Simplified **Cardiopulmonary Assessment** with the 6MWT App

An exercise test for assessing an integrated global response of multiple cardiopulmonary and musculoskeletal systems. Gain information on the patient's functional capacity, therapy response and prognosis.

- > An optimised way of performing an exercise test according to the ATS/ERS guidelines
- > **Step-by-step protocol** for consistent testing process with accurate and repeatable results
- > Standardised test with an **extensive report**

## 6MWT

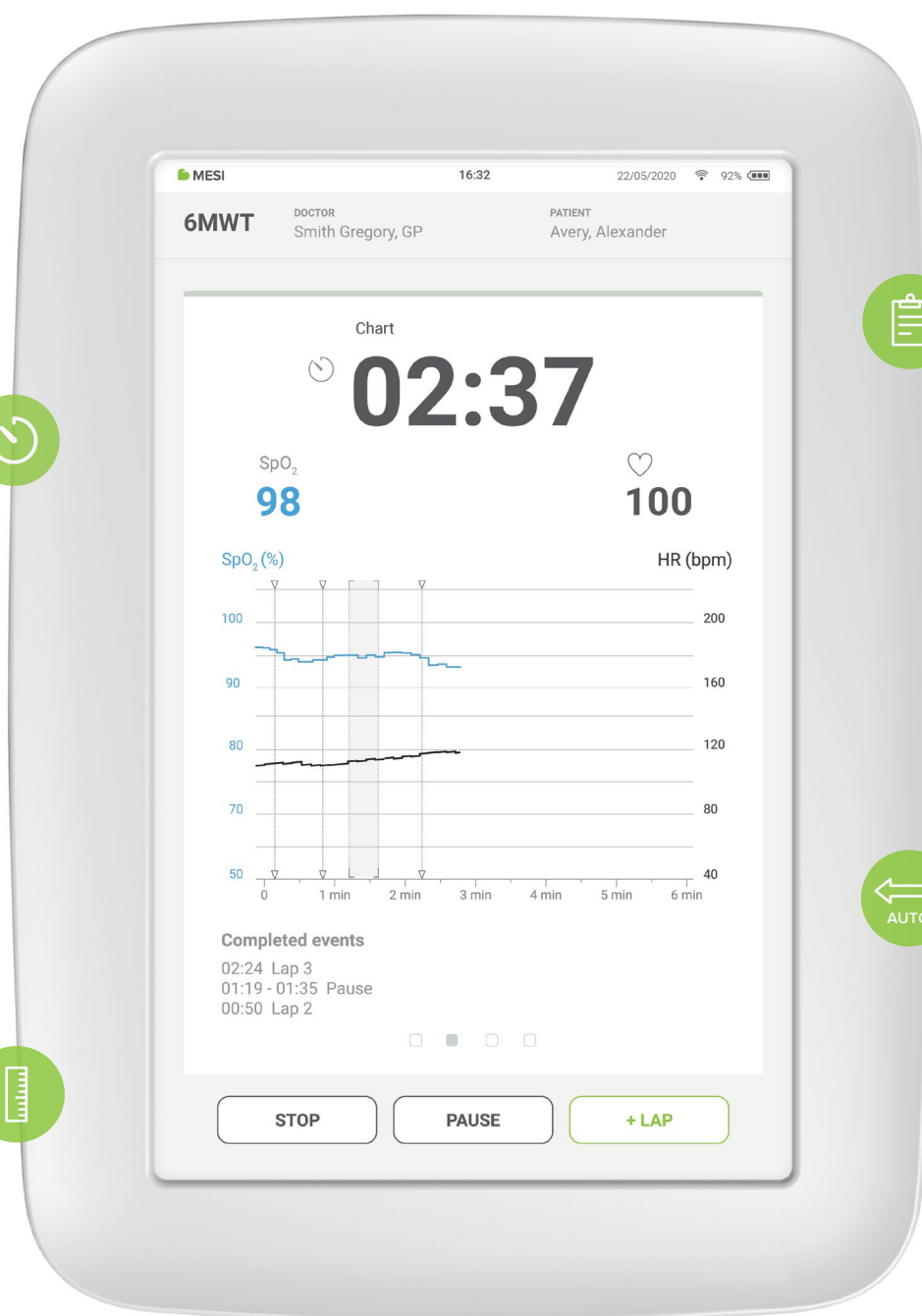
6-Minute Walk Test

OPTION TO  
ENABLE  
A POST-TEST  
RECOVERY PERIOD

10- OR 15-POINT  
BORG SCALE

PRE- & POST-  
TEST PATIENT  
CONDITION  
RECORD

AUTOMATIC  
DISTANCE  
CALCULATION



## Everything in One Place

Wondering where you can find out more about MESI apps? Look no further! MESI mSTORE is a one stop-place for browsing our new products, ordering demo apps and making inquiries about custom app development.

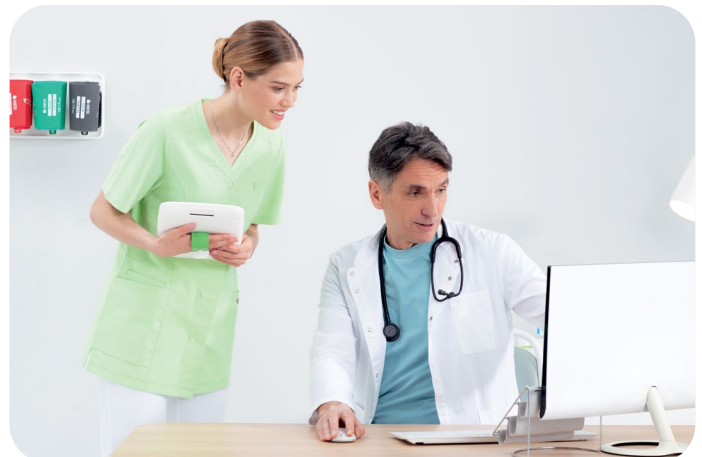
FIND MORE TOOLS FOR  
YOUR MESI mTABLET AND  
MESI mRECORDS

ADD PRODUCTS  
TO YOUR WISHLIST



REQUEST  
DEMO APPS

- **Enhance your workflow** with smart clinical and administration apps
- **Find all available products** from MESI and 3rd party developers in one place
- **Temporarily activate demo applications** to see how they suit your practice
- **Find out more** about our custom app development for healthcare providers and industry partners: [mstore@mesimedical.com](mailto:mstore@mesimedical.com)





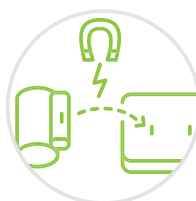
# Set-up Options

Whether at your practice or home visits, MESI accessories offer maximum mobility and space optimisation

## Table-top Layout

# All Devices within Your Reach

- **Ideal layout for the doctor's office**, where quick and reliable vital sign measurements are performed
- **Plug-and-play set-up** with no technical skills required
- **Simultaneous charging** of all modules and the MESI mTABLET



MAGNETIC CHARGING CONNECTOR



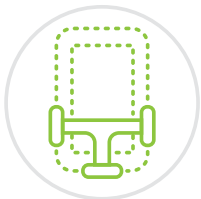
UP TO FOUR MODULES ON THE CHARGING STATION



## Wall-mounted Layout

# Space-saving Option for Charging and Storage

- **Ideal layout for the doctor's office**, where quick and reliable vital sign measurements are performed
- **Plug-and-play set-up** with no technical skills required
- **Simultaneous charging** of all modules and the MESI mTABLET



DEDICATED WALL-MOUNT  
FOR THE MESI mTABLET



ADD-ONS FOR PATIENT  
CABLE STORAGE



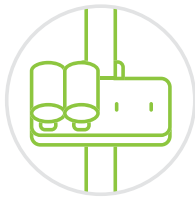
VERTICAL OR HORIZONTAL  
MOUNTING OPTION



## MESI mTABLET Trolley

# Wireless Diagnostic Station on Wheels

- **Secure storage and complete mobility** of the whole MESI mTABLET system
- Adaptable to the scope of the individual's use, with the option to **customise the tray configuration**
- **Simultaneous charging of all modules**, while providing enough space for all accessories and a printer
- Upgradeable with an **automated ECG vacuum electrode system**



MESI mTABLET CHARGING  
STATION SHELF



GENERAL SHELF



PRINTER SHELF



ECG VACUUM  
ELECTRODE SYSTEM





## MESI mTABLET Medical Trolley Bag

# Your Entire System: Wherever, Whenever

- **Ideal for home visits**
- Wheeled case that fits the **entire MESI mTABLET system**, including charging plates and accessories
- **Separate compartments** for personal items and other medical supplies, with a dedicated space for a 15" laptop
- Compliant with **carry-on bag requirements** of most airlines



WHEELS FOR QUICK TRANSPORT



COMFORTABLE SHOULDER STRAP



QUICK PULL-UP HANDLE



CARRY-ON LUGGAGE COMPLIANT





# MESI mTABLET Accessories



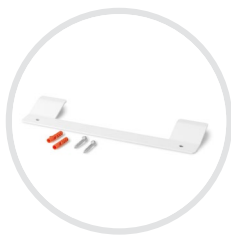
## VERTICAL WALL - MOUNTING BRACKETS

*System*



## TUBELESS CUFF 4 SET – LARGE

*ABI*



## HORIZONTAL WALL - MOUNTING BRACKETS

*System*



## TUBELESS CUFF 2 SET – LARGE

*TBI, BP*



## MESI MTABLET POWER SUPPLY

*System*



## REUSABLE CUFF PAIR: ME- DIUM, LARGE

*TBI, TBP*



## MESI MTABLET SYSTEMS DAISY CHAIN

*System*



## Y SENSOR CABLE

*SPO2*



## MOUTHPIECE

*SPIRO*



## SOFTTIP® SENSOR CABLE

*SPO2*



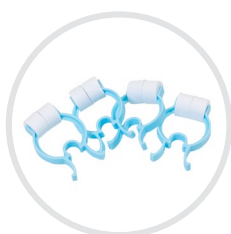
## MOUTHPIECE FILTERS

*SPIRO*



## WRAP SENSOR CABLE

*SPO2*



## DISPOSABLE NOSE CLIPS

*SPIRO*



## EARCLIP SENSOR

*SPO2*



**PATIENT CABLE –  
BANANA ADAPTER**

ECG



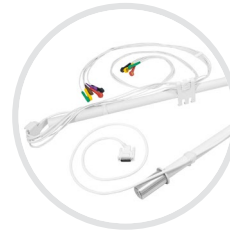
**DISPOSABLE ELECTRODES**

ECG



**BANANA ADAPTER –  
ALLIGATOR CLIP**

ECG



**MESI ECG SUPPORT ARM**

ECG



**BANANA ADAPTER –  
CLIP WITH EXTENSION**

ECG



**STRÄSSLE ELECTRODE 1M**

ECG



**ECGMD MOUNT FOR  
STRÄSSLE DT100 TPLUS**

ECG



**STRÄSSLE DT80 T**

ECG



# EHR Integrations

Seamless incorporation into your current medical administration system

# Storing Reports Automatically

The MESI mTABLET can fully adapt to your workflow. You can print out your results immediately, store them in a dedicated folder on your computer, or automatically upload them to your EHR software. Choose the level of integration that best fits your evolving requirements.



**MESI mRECORDS** for printouts and generating PDFs



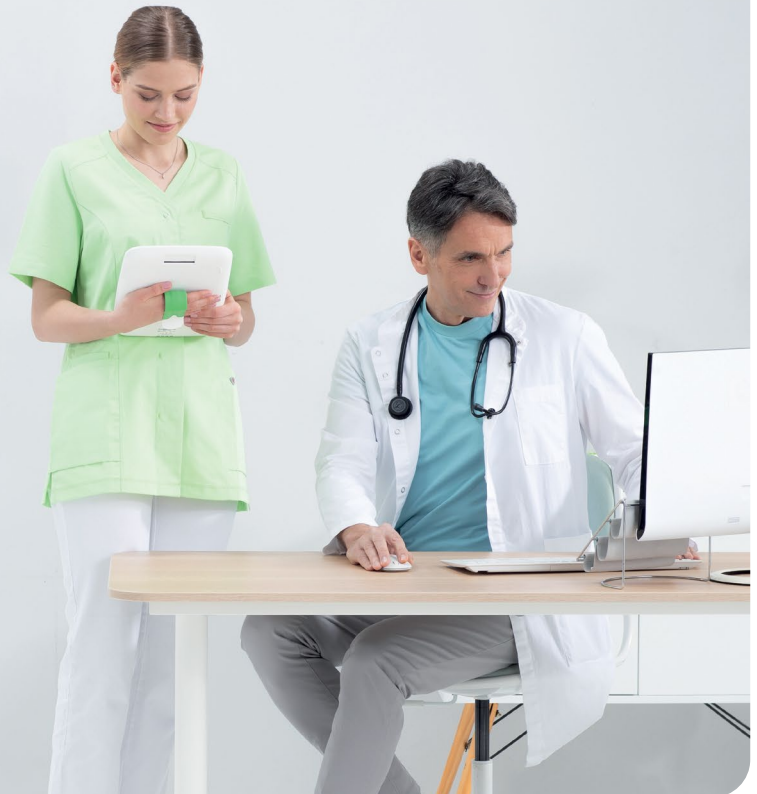
**Direct PDF storage** from the MESI mTABLET using the MESI mTABLET Print Service



**Worklist integration**, supporting GDT, HL7, DICOM, XML



**Full-scale integration** providing a completely custom solution



Angiolog

 **Best Practice**  
An evolution in medical software

 **CompuGroup Medical**

 **duria**  
Software von Ärzten für Ärzte

 **EMIS**  
connecting healthcare

 **MedicalDirector**

 **sas**

 **SRCInfonet**

systemone

 **Comedo**  
von Ärzten für Ärzte

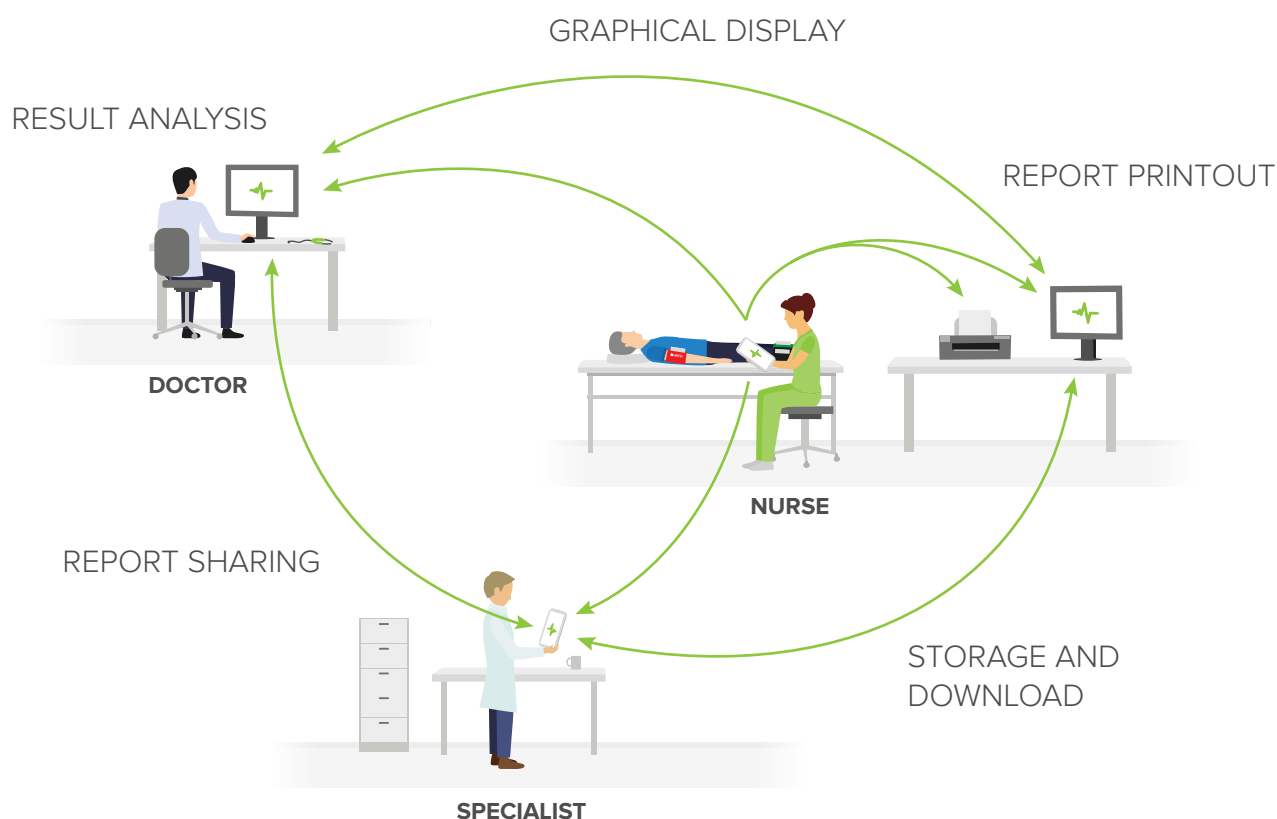
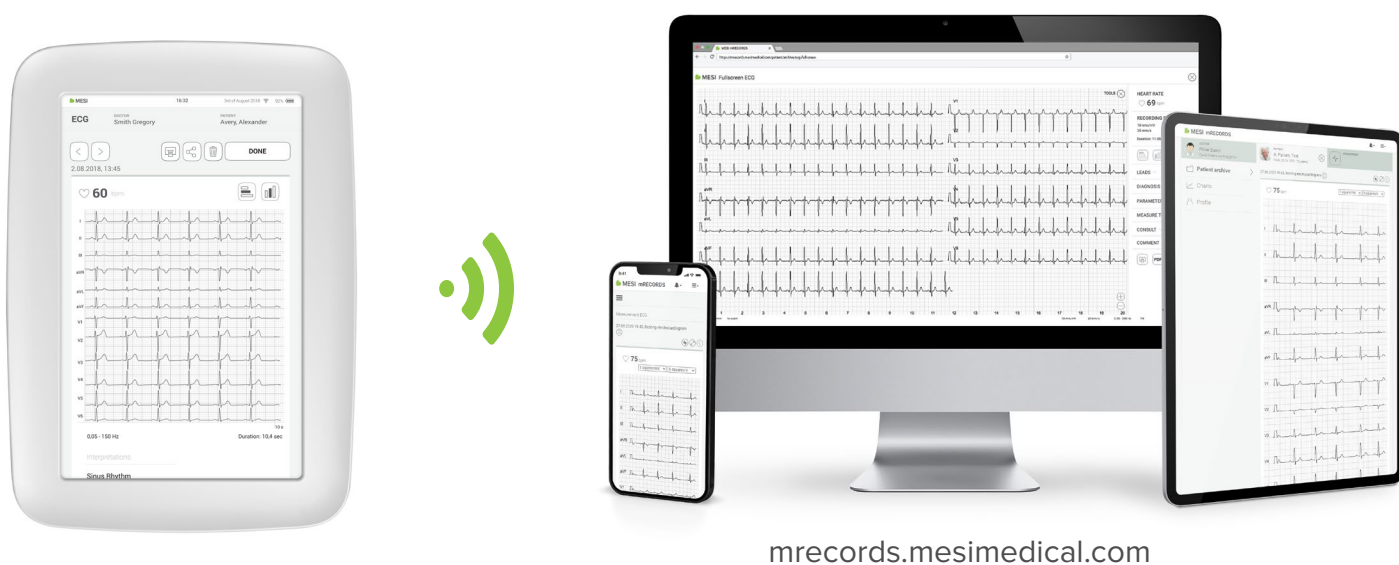
 **Vision3**

 **Vveda**

 **ZEDMED**

## Accessing Reports Anywhere

Every MESI mTABLET comes with MESI mRECORDS software. It ensures that all your measurements and patient data are automatically stored, and available for further analysis and review. MESI mRECORDS can be accessed by any device through secure login.





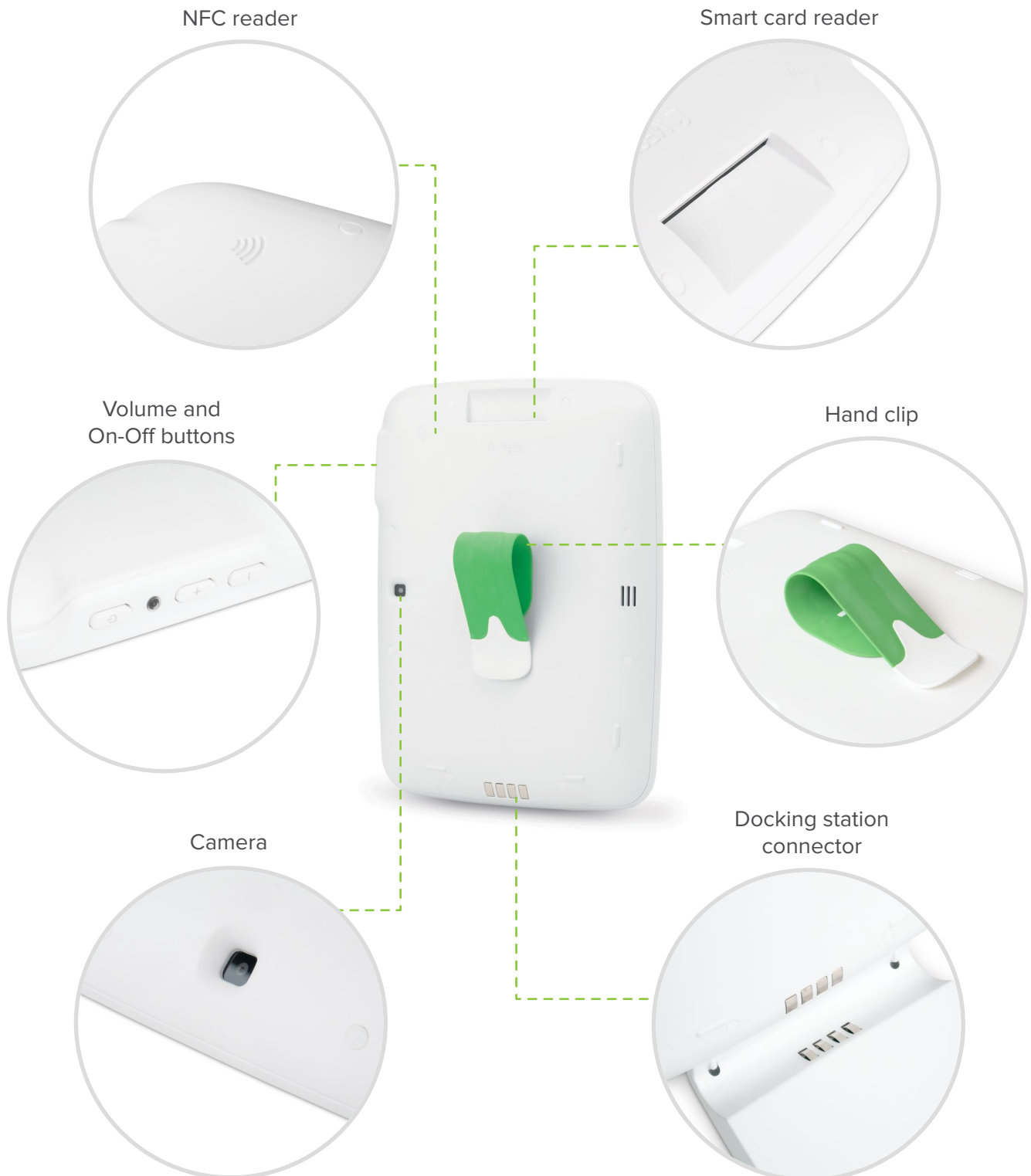
# Technical Specifications

Details on design, performance, compatibility, requirements, and compliance standards

# Certified Medical Tablet

## Designed for Use in Medical Environments

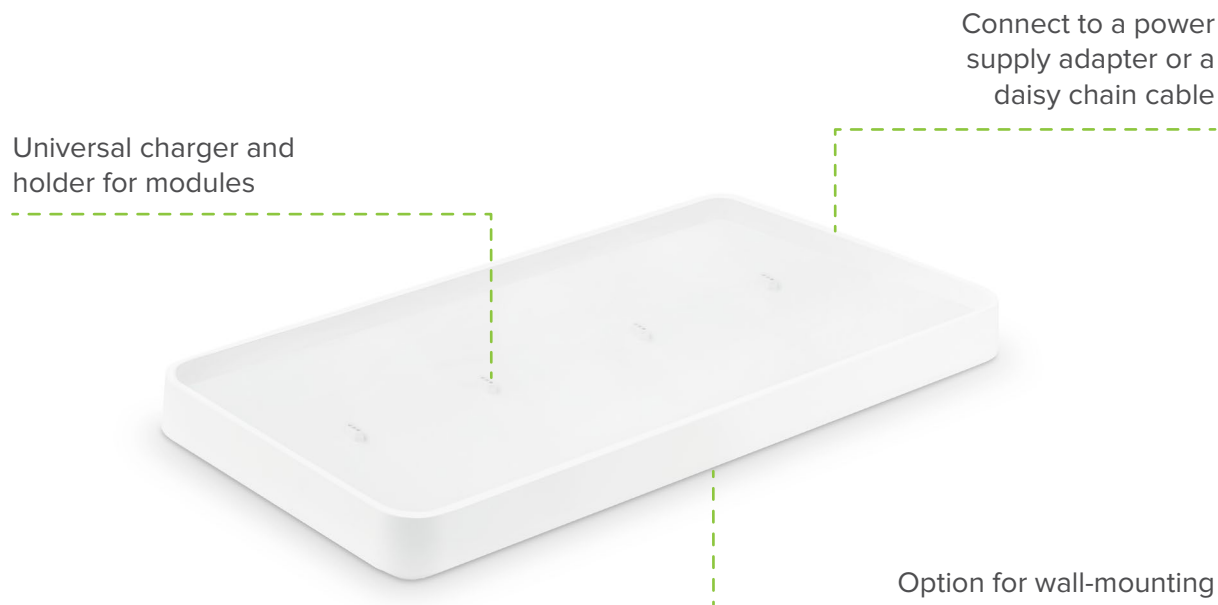
### MESI mTABLET



# Wireless diagnostic modules



# Charging plate



# MESI mTABLET ECG Technical Specifications

## Measurement Specifications

Electrode placement detection  
Pacemaker detection:  $> \pm 2 \text{ mV} / 0.1 \text{ ms}$   
Patient input circuitry: Fully floating and isolated, defibrillation protected (using original MESI or approved patient cable)

## Accuracy

CMRR:  $> 110 \text{ dB}$   
Sampling rate: 32K samples/second/channel (sampling frequency is done internally, output sampling frequency from module to tablet is 1 kHz)  
Resolution:  $2.5 \text{ uV} / 19 \text{ bit}$   
ECG analysis frequency: 1000 samples/second  
Pacemaker detection:  $\pm 2 \text{ mV} / \pm 0.1 \text{ ms}$   
Heart rate range: 30-300 bpm

## Processing

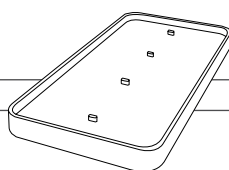
Interpretation: University of Glasgow Analysis Software  
Patient data: name, date of birth, race  
Measurement data is always first 10 seconds of data at 500 Hz rate per channel (5000 samples)  
Low-pass filter: 150 Hz, 250 Hz  
High-pass (baseline) filter: 0.05 Hz, 0.2 Hz, 0.5 Hz  
Myogram (muscle tremor) filter:  
25 Hz (40 dB/dec) or 35 Hz (20 dB/dec)  
Mains filter: Distortion-free suppression of superimposed 50 or 60 Hz sinusoidal interferences using an adaptive digital filter  
Lead display: 6:6+1, 6:6, 3:3 main, 3:3 aux, 6 main, 6 aux, 3:4, 12, 3:4+II  
Sensitivity: 5 mm/mV, 10 mm/mV, 20 mm/mV  
Recording speed: 12.5 mm/s, 25 mm/s, 50 mm/s

## Power & Battery

High-power rechargeable Lithium-Polymer battery  
Capacity: 1240 mAh  
Examinations per battery charge:  $> 2000$   
Continuous use:  $> 5.5 \text{ h}$   
Charging time for depleted battery:  
Approximately 2 hours (minimum charge time for 1 automatic mode ECG: 10 minutes)  
Input: 100-240 V AC / 50-60 Hz / 350 mA  
Output: 5V DC / 5.0 A

## 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 g  
Positioning types:  
Desk, wall mount or trolley



## Module Dimensions

Width: 40 mm (1.57 inches)  
Depth: 48 mm (1.89 inches)  
Height: 135 mm (5.31 inches)  
Weight: 220 g



## Smart Data Management

Secure report access with the out-of-the-box platform - MESI mRECORDS  
Print options:  
Via MESI mTABLET: direct printing through network printers.  
Via MESI mTABLET Print Service: This service acts as a proxy and takes print requests from the mTABLET and either sends them to a connected printer or saves the documents as PDFs.  
Worklist integration for: DICOM, HL7, XML, GDT, JSON  
Full custom integration on request

## Protection Classification

Type of protection against electric shock: Class II  
Medical device classification: Class IIa  
Applied parts: CF  
RF emissions (CISPR 11): Group 1, Class B  
Ingress protection: IP44

## Applied Standards

EN 60601-1 General requirements for Safety  
EN 60601-1-2 Electromagnetic compatibility - Requirements and tests  
EN 60601-2-25 Particular requirements for basic safety and essential performance of electrocardiographs

## Operating Conditions

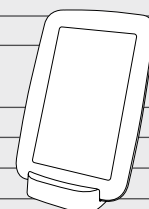
Temperature, operating:  $10^{\circ}$  to  $40^{\circ}\text{C}$   
Relative humidity: 25 to 85% (no condensation)  
Pressure during operation: 700 to 1060 hPa

## Transport & Storage Conditions

Temperature:  
 $-15^{\circ}$  to  $50^{\circ}\text{C}$  ( $< 1 \text{ month}$ )  
 $-15^{\circ}$  to  $40^{\circ}\text{C}$  ( $< 3 \text{ months}$ )  
 $-15^{\circ}$  to  $25^{\circ}\text{C}$  ( $< 12 \text{ months}$ )  
Relative humidity: 25 to 85% (no condensation)  
Pressure during operation: 700 to 1060 hPa

## MESI mTABLET Technical Specifications

Operating System: MESI OS  
Processor: CPU Quad ARM Cortex A53 @ up to 1.2 GHz 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, an Ethernet cable, a USB-C port, 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 mTABLET ABI Technical Specifications

## Measurements

Ankle-Brachial Pressure Index using improved oscillometric method and plethysmography, with PADsense™ algorithm

Heart rate and systolic, diastolic and mean blood pressure using an improved oscillometric method and plethysmography

## Measurement Extensions\*

Blood Pressure

Averaging Blood Pressure

Dual Blood Pressure

\*Available as an upgrade

## Measurement Range

Pressure: 0 to 299 mmHg

Heart rate: 30 to 199 bpm

## Accuracy

Pressure: within  $\pm 5$  mmHg

Heart rate: within  $\pm 5\%$  of readings

ABPI: within  $\pm 0.1$

## Power & Battery

High-power rechargeable Lithium-Polymer battery

Capacity: 1240 mAh

Examinations per battery charge: > 200

Charge time for depleted battery (for each unit): approximately 1.5 hours

Input: 100-240 V AC / 50-60 Hz / 350 mA

Output: 5 V DC / 5.0 A

## Module Dimensions

Width: 40 mm (1.57 inches)

Depth: 40 mm (1.57 inches)

Height: 150 mm (5.91 inches)

Weight: 286 g



## Charging Station

Dual purpose of the charging station: safe storage of the module between measurements and fully charged device at all times.

Width: 400 mmw

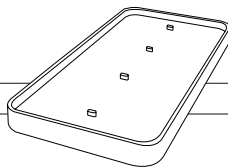
Depth: 200 mm

Height: 38 mm

Weight: 675 g

Positioning types:

Desk, wall-mount or trolley



## Smart Data Management

Secure report access with the out-of-the-box platform - MESI mRECORDS

Print options:

Via MESI mTABLET: direct printing through network printers.

Via MESI mTABLET Print Service: This service acts as a proxy and takes print requests from the mTABLET and either sends them to a connected printer or saves the documents as PDFs.

Worklist integration for: DICOM, HL7, XML, GDT, JSON

Full custom integration on request

## Connectivity

Data connectivity with MTABMD (Bluetooth 2.1 + EDR)

Receiving section

Frequency range: 2401.3 MHz - 2480.7 MHz

Bandwidth: 0.930 MHz

Automatic remote updates of software and hardware

## Protection Classification

Protection against electric shock: Class II

Medical device classification: Class IIa

Applied parts: Type BF Applied part

RF emissions (CIPSR 11): Group 1. Class B

Ingress protection: IP42

## Applied Standards

EN 60601-1 General requirements for Safety

EN 60601-1-2 Electromagnetic compatibility - Requirements and tests

EN 80601-2-30 Particular requirements for the basic safety and essential performance of automated, non-invasive sphygmomanometers

## Operating Conditions

Temperature, operating: 10° to 40°C

Relative humidity: 25 to 85% (no condensation)

Pressure during operation: 700 to 1060 hPa

## Transport & Storage Conditions

Temperature:

-15° to 50°C (< 1 month)

-15° to 40°C (< 3 months)

-15° to 25°C (< 12 months)

Relative humidity: 25 to 85% (no condensation)

Pressure during operation: 700 to 1060 hPa

## MESI mTABLET Technical Specifications

Operating System: MESI OS

Processor: CPU Quad ARM Cortex A53

@ up to 1.2 GHz 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, an Ethernet cable, a USB-C port, and 2.4 GHz single-band Bluetooth 4.1.

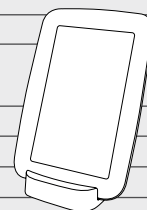
Camera: 5 MP

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 mTABLET TBI Technical Specifications

## Measurements

Toe-Brachial Pressure index combining plethysmography-oscillometric and photoplethysmographic methods  
Systolic toe blood pressure, systolic and diastolic brachial blood pressure, heart rate using plethysmography - oscillometric and photoplethysmographic methods

## Measurement Extensions\*

Blood Pressure  
Averaging Blood Pressure  
Dual Blood Pressure  
Toe Blood Pressure

\*Available as an upgrade

## Measurement Range

Pressure: 0 to 299 mmHg (arms)  
Pressure: 20 to 250 mmHg (toes)  
Heart rate: 30 to 199 bpm

## Accuracy

Pressure: within  $\pm 5$  mmHg  
Heart rate: within  $\pm 5\%$  of readings  
TBI: within  $\pm 0.1$

## Power & Battery

High-power rechargeable Lithium-Polymer battery  
Capacity: 1240 mAh  
Examinations per battery charge: > 200  
Charge time for depleted battery (for each unit): approximately 1.5 hours  
Input: 100-240 V AC / 50-60 Hz / 350 mA  
Output: 5 V DC / 5.0 A

## Module Dimensions (TBPMD)

Width: 40 mm (1.57 inches)  
Depth: 40 mm (1.57 inches)  
Height: 150 mm (5.91 inches)  
Weight: 244 g



## Module Dimensions (CUFFMD)

Width: 40 mm (1.57 inches)  
Depth: 40 mm (1.57 inches)  
Height: 150 mm (5.91 inches)  
Weight: 286 g



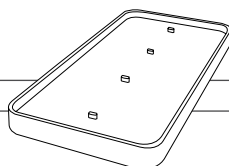
## Charging Station

Dual purpose of the charging station: safe storage of the modules between measurements and fully charged device at all times

Width: 400 mm  
Depth: 200 mm  
Height: 38 mm  
Weight: 675 g

Positioning types:

Desk, wall-mount or trolley



## Smart Data Management

Secure report access with the out-of-the-box platform - MESI mRECORDS

Print options:

Via MESI mTABLET: direct printing through network printers.  
Via MESI mTABLET Print Service: This service acts as a proxy and takes print requests from the mTABLET and either sends them to a connected printer or saves the documents as PDFs.  
Worklist integration for: DICOM, HL7, XML, GDT, JSON  
Full custom integration on request

## Connectivity

Data connectivity with MTABMD (Bluetooth 2.1 + EDR)  
Receiving section  
Frequency range: 2401.3 MHz - 2480.7 MHz  
Bandwidth: 0.930 MHz  
Automatic remote updates of software and hardware

## Applied Standards:

EN 60601-1 General requirements for Safety  
EN 60601-1-2 Electromagnetic compatibility - Requirements and tests  
EN 80601-2-30 Particular requirements for the basic safety and essential performance of automated, non-invasive sphygmomanometers

## Protection Classification

Protection against electric shock: Class II  
Medical device classification: Class IIa  
Applied parts: Type BF Applied part  
RF emissions (CIPSR 11): Group 1. Class B  
Ingress protection: IP42

## Operating Conditions

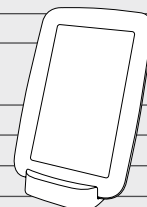
Temperature, operating: 10° to 40°C  
Relative humidity: 25 to 85% (no condensation)  
Pressure during operation: 700 to 1060 hPa

## Transport & Storage Conditions

Temperature:  
-15° to 50°C (< 1 month)  
-15° to 40°C (< 3 months)  
-15° to 25°C (< 12 months)  
Relative humidity: 25 to 85% (no condensation)  
Pressure during operation: 700 to 1060 hPa

## MESI mTABLET Technical Specifications

Operating System: MESI OS  
Processor: CPU Quad ARM Cortex A53 @ up to 1.2 GHz 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, an Ethernet cable, a USB-C port, 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 mTABLET BP Technical Specifications

## Measurements

Heart rate and systolic, diastolic and mean blood pressure using improved oscillometric method and plethysmography

## Measurement Extensions\*

Averaging Blood Pressure

Dual Blood Pressure

\*Available as an upgrade

## Measurement Range

Pressure: 0 to 299 mmHg

Heart rate: 30 to 199 bpm

## Accuracy

Pressure: within  $\pm 5$  mmHg

Heart rate: within  $\pm 5\%$  of readings

## Power & Battery

High-power rechargeable Lithium-Polymer battery

Capacity: 1240 mAh

Examinations per battery charge: > 200

Charge time for depleted battery (for each unit): approximately 1.5 hours

Input: 100-240 V AC / 50-60 Hz / 350 mA

Output: 5 V DC / 5.0 A

## Module Dimensions

Width: 40 mm (1.57 inches)

Depth: 40 mm (1.57 inches)

Height: 150 mm (5.91 inches)

Weight: 286 g



## 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

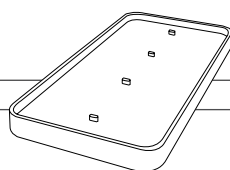
Depth: 200 mm

Height: 38 mm

Weight: 675 g

Positioning types:

Desk, wall-mount or trolley



## Smart Data Management

Secure report access with the out-of-the-box platform - MESI mRECORDS

Print options:

Via MESI mTABLET: direct printing through network printers.

Via MESI mTABLET Print Service: This service acts as a proxy and takes print requests from the mTABLET and either sends them to a connected printer or saves the documents as PDFs.

Worklist integration for: DICOM, HL7, XML, GDT, JSON

Full custom integration on request

## Connectivity

Data connectivity with MTABMD (Bluetooth 2.1 + EDR)

Receiving section

Frequency range: 2401.3 MHz - 2480.7 MHz

Bandwidth: 0.930 MHz

Automatic remote updates of software and hardware

## Protection Classification

Protection against electric shock: Class II

Medical device classification: Class IIa

Applied parts: Type BF Applied part

RF emissions (CIPSR 11): Group 1. Class B

Ingress protection: IP42\*

## Applied Standards

EN 60601-1 General requirements for Safety

EN 60601-1-2 Electromagnetic compatibility - Requirements and tests

EN 80601-2-30 Particular requirements for the basic safety and essential performance of automated, non-invasive sphygmomanometers

## Operating Conditions

Temperature, operating: 10° to 40°C

Relative humidity: 25 to 85% (no condensation)

Pressure during operation: 700 to 1060 hPa

## Transport & Storage Conditions

Temperature:

-15° to 50°C (< 1 month)

-15° to 40°C (< 3 months)

-15° to 25°C (< 12 months)

Relative humidity: 25 to 85% (no condensation)

Pressure during operation: 700 to 1060 hPa

## MESI mTABLET Technical Specifications

Operating System: MESI OS

Processor: CPU Quad ARM Cortex A53

@ up to 1.2 GHz 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, an Ethernet cable, a USB-C port, and 2.4 GHz single-band Bluetooth 4.1.

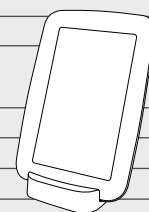
Camera: 5 MP

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 mTABLET SPO2 Technical Specifications

## Measurements:

Pulse oximetry and heart rate

## Measurement Extensions\*

6-minute walk test

\*Available with upgrade

## Measurement Range

SpO2 measurement: 45-100 %

Pulse frequency measurement: 20-300 bpm

## Accuracy

Plethysmogram: 0-28 LSB

Raw plethysmogram: 0-224 LSB

Signal quality: 0-100%

## Power & Battery

High-power rechargeable Lithium-Polymer battery

Capacity: 1240 mAh

Examinations per battery charge: > 8000

Continuous use: > 56 h

Charge time for depleted battery:

Approximately 2 hours

Input: 100-240 V AC / 50-60 Hz / 350 mA

Output: 5 V DC / 5.0 A

## 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

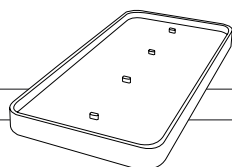
Depth: 200 mm

Height: 38 mm

Weight: 675 g

Positioning types:

Desk, wall-mount or trolley



## Module Dimensions

Width: 40 mm (1.57 inches)

Depth: 48 mm (1.89 inches)

Height: 135 mm (5.31 inches)

Weight: 210 g



## Smart Data Management

Secure report access with the out-of-the-box platform - MESI mRECORDS

Print options:

Via MESI mTABLET: direct printing through network printers.

Via MESI mTABLET Print Service: This service acts as a proxy and takes print requests from the mTABLET and either sends them to a connected printer or saves the documents as PDFs.

Worklist integration for: DICOM, HL7, XML, GDT, JSON

Full custom integration on request

## Protection Classification

Type of protection against electric shock: Class II

Medical device classification: Class IIa

Applied parts: CF

RF emissions (CISPR 11): Group 1, Class B"

Ingress protection: IP44

## Applied Standards

EN 60601-1 General requirements for Safety

EN 60601-1-2 Electromagnetic compatibility - Requirements and tests

EN 80601-2-61 Particular requirements for basic safety and essential performance of pulse oximeter equipment

## Operating Conditions

Temperature, operating: 10° to 40°C

Relative humidity: 25 to 85% (no condensation)

Pressure during operation: 700 to 1060 hPa

## Transport & Storage Conditions

Temperature:

-15° to 50°C (< 1 month)

-15° to 40°C (< 3 months)

-15° to 25°C (< 12 months)

Relative humidity: 25 to 85% (no condensation)

Pressure during operation: 700 to 1060 hPa

## MESI mTABLET Technical Specifications

Operating System: MESI OS

Processor: CPU Quad ARM Cortex A53

@ up to 1.2 GHz 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, an Ethernet cable, a USB-C port, and 2.4 GHz single-band Bluetooth 4.1.

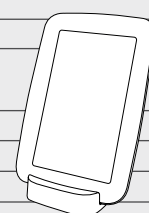
Camera: 5 MP

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 mTABLET SPIRO Technical Specifications

## Measurement Specifications

### Quick spirometry:

Measurement mode: FEV6

Parameters: PEF, FEV1, FEV6, FEV1/FEV6

### Primary spirometry:

Measurement modes: FEVC, VC, Pre- & Post-Drug Phase  
Parameters: PEF, FEV0.5, FEV1, FEV6, FVC, FET, TZERO, FEV1% (FVC), FEV1% (FEV6), FEF (25–75), FEF25, FEF50, FEF75, PEFT, VEXT, VC

Verification of each maneuver through on-screen quality indicators.

### Advanced spirometry:

Measurement modes: FVC, FEVC, VC, Pre- & Post-Drug phase, Incentive mode (animation)

Parameters: PEF, FEV0.5, FEV1, FEV6, FVC, FET, TZERO, FEV1% (FVC), FEV1% (FEV6), FEF (25–75), FEF25, FEF50, FEF75, PEFT, VEXT, VC, TZERO, PIF, FIV1, FIV0.5, FIV6, FIVC, FIT

## 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: +/- 14 L/s

## 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: > 4 h

Charge time for depleted battery:

Approximately 1 hour (minimum charge time for a complete measurement using the FVC mode: 10 minutes)

Input: 100-240 V AC / 50-60 Hz / 350 mA

Output: 5 V DC / 5.0 A

## 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

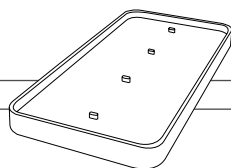
Depth: 200 mm

Height: 38 mm

Weight: 675 g

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 g



## Smart Data Management

Secure report access with the out-of-the-box platform - MESI mRECORDS

Print options:

Via MESI mTABLET: direct printing through network printers.

Via MESI mTABLET Print Service: This service acts as a proxy and takes print requests from the mTABLET and either sends them to a connected printer or saves the documents as PDFs.

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 (CISPR 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 months)

-15° to 25°C (<12 months)

Relative humidity: 25 to 85% (no condensation)

## MESI mTABLET Technical Specifications

Operating System: MESI OS

Processor: CPU Quad ARM Cortex A53

@ up to 1.2 GHz 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, an Ethernet cable, a USB-C port, and 2.4 GHz single-band Bluetooth 4.1.

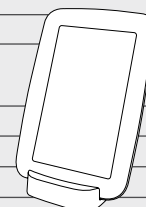
Camera: 5 MP

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 mTABLET THERMO Technical Specifications

## Measurements:

Human body temperature of adult and paediatric patients

## Measurement Range

### Infrared probe:

Distance from measuring point: 3 cm

Measurement range: *Skin surface temp.*: 34 to 42 °C

*Body temp.*: 36.4 to 43.8 °C

Extended measurement range: *Surface temp.*: 28.6 to 41.2 °C

*Body temp.*: 32 to 43 °C

### Contact probe:

Measurement range: *Surface/body temp.*: 34 to 42 °C

Extended measurement range: *Surface/body temp.*: 32 to 43 °C

## Accuracy

### Infrared probe:

Accuracy for measurement range:  $\pm 0.3$  °C

Accuracy for extended measurement range:  $\pm 0.4$  °C

### Contact probe:

Accuracy for measurement range:  $\pm 0.1$  °C

Accuracy for extended measurement range:  $\pm 0.4$  °C

## Power & Battery

### Infrared probe:

Rechargeable Lithium-Polymer battery

Capacity: 2x620 mAh

AC/DC adaptor: NEO030.0-I-X-05

Input: 100-240 V AC / 50-60 Hz / 350 mA

Output: 5V DC / 5.0 A

Number of measurements per battery charge: > 2500

Continuous use: 19 h

Charge time for depleted battery: approx. 2 h

Number of discharge cycles or years after which a rechargeable battery needs to be replaced: 500 cycles

### Contact probe:

Rechargeable Lithium-Polymer battery

Capacity: 15 mAh

Wireless charging from IRT

Number of measurements per battery charge: > 120

Continuous use: 2 h

Charge time for depleted battery: approx. 2 h

Number of discharge cycles or years after which a rechargeable battery needs to be replaced: 500 cycles

## Charging Station

Dual purpose of the charging station: safe storage of the module between measurements and fully charged device at all times.

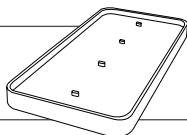
Width: 400 mm

Depth: 200 mm

Height: 38 mm

Weight: 675 g

Positioning types: Desk, wall-mount or trolley



## Module Dimensions

### Infrared probe:

Width: 40 mm (1.57 inches)

Depth: 41.6 mm (1.57 inches)

Height: 153 mm (7.05 inches)

Weight: 213 g

### Contact probe:

Fi: 10 mm (0.39 inches) X 9 mm (0.35 inches)

Length: 118 mm (4.65 inches)

Weight: 7.5 g



## Smart Data Management

Secure report access with the out-of-the-box platform - MESI mRECORDS

Print options:

Via MESI mTABLET: direct printing through network printers.

Via MESI mTABLET Print Service: This service acts as a proxy and takes print requests from the mTABLET and either sends them to a connected printer or saves the documents as PDFs.

Worklist integration for: DICOM, HL7, XML, GDT, JSON

Full custom integration on request

## Protection Classification

Type of protection against electric shock: Class II

Medical device classification: Class IIa

Applied parts: Type B applied part

Software classification: Class B

RF emissions (CISPR 11): Group 1. Class A

## Applied Standards

EN 60601-1 General requirements for Safety

EN 60601-1-2 Electromagnetic compatibility - Requirements and tests

ISO 80601-2-56 Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement

## Operating Conditions

### Infrared probe:

Temperature, operating: 15 to 40 °C

Relative humidity: 15 to 90% (no condensation)

Pressure during operation: 700 to 1060 hPa

Ingress protection rating: IP42

### Contact probe:

Temperature, operating: 10 to 40 °C

Relative humidity: 15 to 90% (no condensation)

Pressure during operation: 700 to 1060 hPa

Ingress protection rating: IP66

## Transport & Storage Conditions

Temperature: -25° to 70°C

Relative humidity: 15 to 90% (no condensation)

Atmospheric pressure: 500 to 1060 hPa (mbar)

## MESI mTABLET Technical Specifications

Operating System: MESI OS

Processor: CPU Quad ARM Cortex A53

@ up to 1.2 GHz 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, an Ethernet cable, a USB-C port, and 2.4 GHz single-band Bluetooth 4.1.

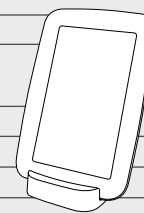
Camera: 5 MP

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 mTABLET Trolley Technical Specifications

**Basic configuration**

**Trolley for MESI mTABLET system**  
Size: 1.147 m x 0.525 m x 0.374 m  
Colour: Signal white (RAL 9003)  
Material: Steel, aluminium and plastic  
Weight (without devices): approx. 23 kg  
Included segments: MESI mTABLET mount, general shelf and charging station shelf  
Number of electrical sockets: 4  
Total number of shelves with custom configuration: 4

**Automated ECG electrode system configuration**

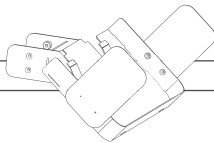
**Trolley for MESI mTABLET system with the ECG vacuum electrode system**  
Size: 1.701 m x 0.525 m x 0.374 m (with folded AVS arm)  
Colour: signal white (RAL 9003)  
Material: steel, aluminium and plastic  
Weight (without devices): approx. 28 kg  
Included segments: MESI mTABLET mount, general shelf, charging station shelf and automated ECG electrode system  
Number of electrical sockets: 4  
Total number of shelves with custom configuration: 4

**Shelf specifics:**

**General shelf**  
0.3336 m x 0.4329 m x 0.0995 m  
Weight: 2 kg



**MESI mTABLET charging station shelf**  
Size: 0.2756 m x 0.1314 m x 0.4299 m  
Weight: 2 kg



**Printer shelf**  
Size: 0.3336 m x 0.4329 m x 0.0995 m  
Weight: 2 kg



# Unlimited Possibilities of Data-Driven Technology



## Supporting your work with medical prediction

The way the MESI mTABLET handles information is unique. The results of objective diagnostic measurements, triage, specialist opinions, consultations and any other data are all stored in one digital place. This can help detect conditions early, predict future outcomes based on past data, and recommend actions. With predictive medical assessment, the MESI mTABLET truly becomes a next-generation tool for timely disease discovery.



## Always up-to-date

The MESI mTABLET is constantly upgraded with additional diagnostic tools and medical apps. This boosts its functionality and gives users access to the information and tools they need.



## Improving information flow between healthcare professionals

Communication between the primary care physician, nurse, and specialist is crucial for the patient's outcome. With the MESI mTABLET, all stakeholders access healthcare information in the same format. This prevents misunderstandings in communication and inconsistencies in reporting, thereby reducing time spent on diagnosis and treatment.



# MESI

Simplifying Diagnostics



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