# **Technical Specifications**

## Mobil-O-Graph® - The 24h PWA Monitor

Measurement range Systolic (SYS): 60 – 290 mmHg

Diastolic (DIA): 30 - 195 mmHg

Accuracy ± 3 mmHg

Pressure range 0 to 300 mmHg

Pulse range 30 to 240 bpm

Measurement method Oscillometric

Measurement protocols • 4 freely editable day/night intervals

• Measurements per hour: 1, 2, 4, 5, 6, 10, 15, 20 or 30

• Optional: automatic transfer of Blood Pressure values via GSM

Memory 300 measurements

Battery capacity > 300 measurements
Operating temperature range +10 °C to +40 °C

Operating air humidity range 15% to 90%

Storage conditions -20 °C to +50 °C temp and 15% to 90% humidity

**Dimensions** 128 x 75 x 30 mm

Weight Approx. 240g including batteries

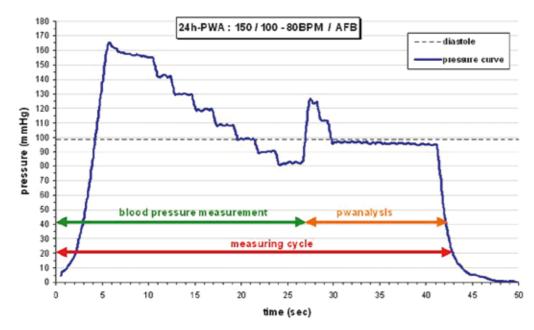
Power supply 2 IEM rechargeable Ni-MH batteries (1,2 V and min. 2100 mAh)

Interfaces • Serial port (cable) compatible for USB Emulation

Infrared

Bluetooth (Class 1/100m)

# **The Pulse Wave Analysis Measuring Method**



Example of a PWA. The oscillometric blood pressure measurement is combined with Pulse Wave Analysis making it very convenient for the patient.

Subject to change without notice.

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Evaluation of Central Hemodynamics over a 24h period - Simplified Clinical Routine

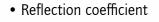


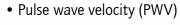




# Pulse Wave Monitoring for Central Hemodynamic Assessment and Risk Stratification of Arterial Hypertension

- Peripheral blood pressure
- Central aortic blood pressure
- Cardiac output
- Peripheral resistance
- Augmentation index (Alx)
- Augmentation pressure





# Indications revealed through PWA • Congestive heart failure NYHA 2-4 • Dilatative cardiomyopathy



• Therapy-resistant hypertension

# Clinical Hemodynamic Assessment and Risk Stratification of Arterial Hypertension – Simplified Clinical Routine

Mobil-O-Graph® – the Pulse Wave Analysis Monitor provides information about vital hemodynamic parameters connected with the stresses of everyday life.

For patients, the procedure is identical to a conventional ABPM. The PWA measurements are based on standard ABPM measurement intervals, and can be individually adapted to the patient's daily routine.

The PWA algorithms have been validated against invasive<sup>1</sup> and non-invasive<sup>2</sup> reference methods.

## Arterial Stiffness: a sensitive predictor

Mobil-O-Graph® – the PWA Monitor enables validated assessment of arterial stiffness over 24 hours, thus avoiding mistaken diagnoses based on single examinations.

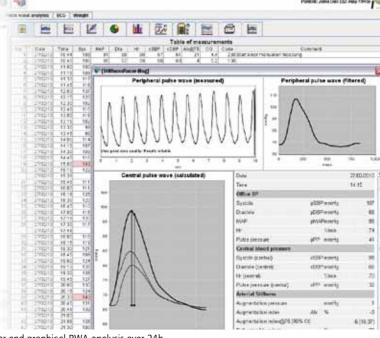
## Hemodynamics - An Aid to Clinical Decisions

24 hour hemodynamic monitoring enables, for the first time, a better insight into a patient's pathophysiology and provides clinical support for diagnosis and treatment.

## **HMS CS Analysis Tool**

HMS CS is a desktop analysis tool for use in hospitals, physicians' offices and clinical research. Pulse Wave Analysis is displayed in tables and easy-to-follow graphical reports, providing a comprehensive statistical assessment.

- Literature:
- <sup>1</sup> Simulation Modelling Practice and Theory 2008; 16:988-997
- $^{2}$  Journal of Human Hypertension 2010; 27



Tabular and graphical PWA analysis over 24h



24h PWA profile



