



Boso-Medicus Prestige + BT

High-quality blood pressure meter with wireless data transmission

Blood pressure is an established vital parameter for diagnosing a multitude of illnesses. Follow-up checks have special significance here. In the out-patient area, blood pressure meters have established themselves which are very easy to operate. Although the values are measured digitally, the values are documented by hand in a journal. Especially in the case of older patients, this very often leads to many gaps in the documentation. The Boso-Medicus Prestige + BT blood pressure meter helps here by automatically transmitting the measured values wirelessly.

This device is a blood pressure computer with state-of-the-art technology. It works according to the oscillometric measuring principle. The pressure fluctuations (oscillations), which are caused by the pulse waves and transferred by the cuff, are saved and evaluated by the microprocessor. The big advantage of this measuring method is that no microphone is required (for measuring methods using microphones, the measurement reliability highly depends on the exact positioning of the microphone when applying the cuff).

The measurements can be transferred to a receiver or PC via a Bluetooth connection. In telemedicine, data is transferred from the base station to an electronic patient file. The measurements are saved there and are analyzed for deviations which might indicate pathology. Thanks to this automatic follow-up, any deterioration in the patient's condition can be detected early on, and the attending telemonitoring center, physician or hospital can intervene by adjusting the therapy. This not only enhances the patient's quality of life, but also efficiently utilizes health care resources. By transmitting the data directly to a computer, manual entries are no longer necessary.

Technical Specification:

1. Areas of application

- Supervision of chronically ill patients
- Supervision of high-risk patients
- Support in caring for older people
- Normal doctor's practice operation

2. Functional description

- Fully automated measurement
- Arrhythmia detection
- Average value display
- Battery operation and (with optional special equipment) mains operation

3. BT transmission

- Establishment of a Bluetooth connection to GSM/GPRS/UMTS devices or approved Bluetooth modem
- Data set consists of the serial number, systolic and diastolic blood pressure values, pulse, time and date of measurement
- Non-transmitted data is saved
- Saved data sets are transmitted at next measurement
- Text message sent via cell phone
- Transmission protocol is provided on request
- Function as master or slave

4. Technical data

- Measuring principle: oscillometric
- Measuring range: 40 to 240 mmHg, 40 to 200 beats/min.
- Cuff pressure: 0 to 320 mmHg
- Cuffs: three sizes (standard, XS, XL); delivered with standard
- Memory capacity: 30 measurements
- Display: LCD
- Operating conditions: ambient temperature 10 to 40 °C
rel. humidity 10 to 85 %
- Storage conditions: ambient temperature - 5 °C to + 50 °C
rel. humidity max. 85 %
- Power supply: DC 6 V (4 x 1.5 AA batteries, IEC LR 6, alkaline manganese)
Alternatively, with optional equipment: Mains power supply DC 6 V,
(polarity: outside MINUS, inside PLUS)
- Battery check: symbol display in the display field
- Weight: 330 g without batteries
- Dimensions (W x H x D): 165 mm x 65 mm x 115 mm
- Instrumentation check: every 2 years
- Classification: protection class II; type BF
- Clinical test (DIN 58130): the measuring precision meets the requirements of EN 1060 part 3
Max. measurement deviation of cuff pressure: ± 3 mmHg
Max. measurement deviation of pulse display: ± 5 %

5. Standards and regulations

- EC directive 93/42/EEC (CE)
- EN 1060-1: Non-invasive sphygmomanometers Part 1: General requirements
- EN 1060-3: Non-invasive sphygmomanometers Part 3: Supplementary Requirements for electro-mechanical blood pressure measuring systems