

SOMNOtouch™ NIBP

Long-term Blood Pressure

+ Holter ECG

+ Oximetry

+ Actigraphy

+ PWV



All in One

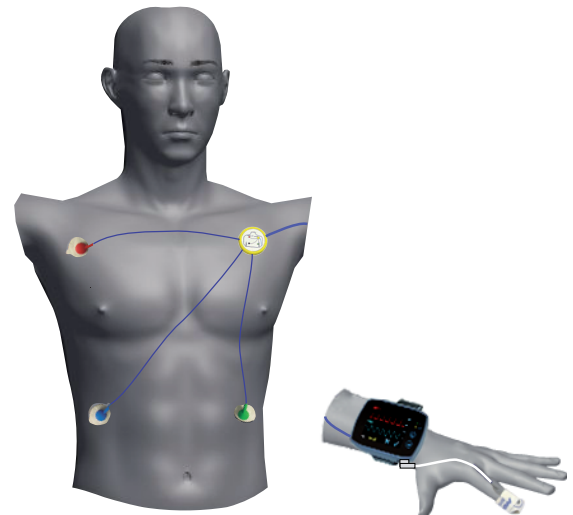
efficient, comfortable, innovative

Continuous, non-invasive blood pressure measurement without cuff

- Systolic & Diastolic Blood Pressure (in mmHg), beat-to-beat, covers all real max. and min. values, especially during REM Sleep and Supine Position
- Easy application with maximum comfort for the patients thanks to reactionless measurement without inflation of the cuff (PTT-based*, validated according to ESH protocol**)
- Minimized deviation caused by Body Position changes (reduction of hydrostatic effect)

Holter ECG

- 3 channel ECG
- Holter ECG analysis (with Schiller Software Plug-in, optional)
- Stress report based on HRV
- Export to different file formats (EDF, SCP, ASCII, etc.)



Oximetry

- Oximetry report
- Flow and Snore optionally available via AUX connection

Actigraphy

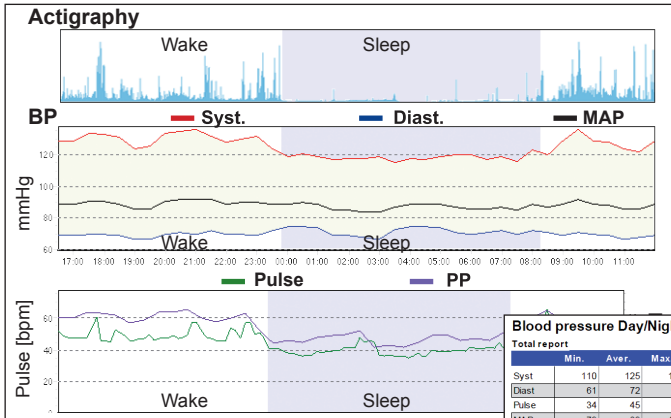
- Sleep/Wake determination***, determination of the real sleeping time, correlation of blood pressure to TIB
- During daytime: correlation of blood pressure values to physiological activity

PWV

- As an indicator for arterial stiffness

Data analysis and report

Blood pressure report



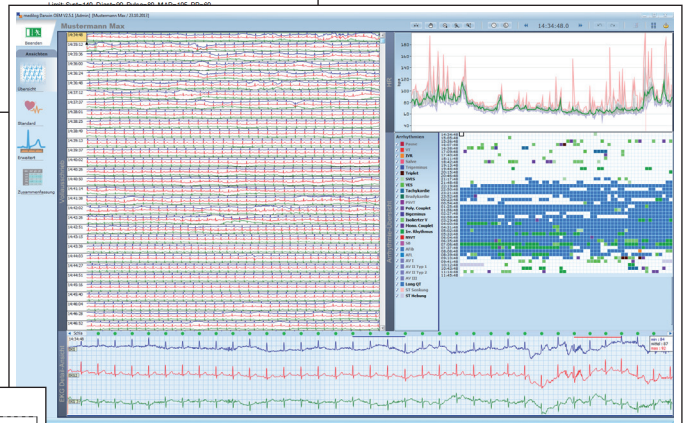
- Continuous 24 hour blood pressure profile
- Automated analysis of ABP levels for normality, white coat syndrome and overnight dipper status
- Detection of NBPF™ (Nocturnal Blood Pressure Fluctuations) as an indicator for cardiac stress
- Determination of the superposition effect of the blood pressure
- Clear sleep/wake allocation by actigraphy***

ECG report

- ECG Holter Analysis with Schiller Software Plug-in: Arrhythmia analysis and ST segment measurement (optional, sold separately)
- Stress report based on HRV

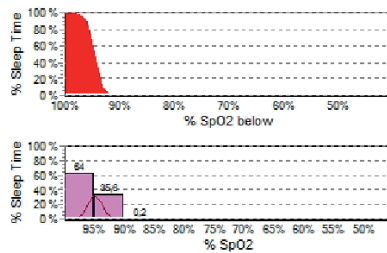
| Day report | | | | | |
|------------|------|-------|------|-----|---------|
| | Min. | Aver. | Max. | SD | > Limit |
| Syst | 113 | 129 | 170 | 8,9 | 13,6 % |
| Diast | 61 | 70 | 78 | 3,3 | 0 % |
| Pulse | 40 | 50 | 97 | 7,7 | 0,7 % |
| MAP | 79 | 90 | 105 | 4,1 | 0,1 % |
| PP | 39 | 59 | 97 | 8,4 | 44,5 % |

| Day/Night Dipping | |
|-------------------|--------|
| Syst | 6,2 % |
| Diast | -4,3 % |
| Pulse | 24,2 % |
| MAP | 1,1 % |
| PP | 18,8 % |



O2 saturation

| | Number (Index) | Time |
|-------------------------------|----------------|----------|
| Number of Desaturations | 69 (8,3) | |
| Minimal SpO2 (%) | 86 | 06:39:06 |
| Baseline O2 saturation | 95 | |
| Average SpO2 | 95 | |
| Number < 90 % | 8 | 0,6 % |
| Number < 80 % | - | 0,0 % |
| Time < 90 % | 0,2 % | 00:00:48 |
| Biggest Desaturation (%) | 10 | 06:37:33 |
| Average Desaturation Time (s) | 24,9 | |
| Longest Desaturation (s) | 81,8 | 07:34:55 |
| Average Min. Desaturation | 92 | |
| Deepest Desaturation (%) | 86 | 06:39:06 |
| Sum all desaturation | 00:28:41 | 5,7 % |
| Average SpO2 Delay (s) | - | |
| Artefact (min) | - | |



Oximetry report

- Display of the blood Oxygen saturation and the correlation between nocturnal SpO₂ and nocturnal blood pressure
- Detection of respiratory based changes of the blood pressure (optional)

Datasheet SOMNOtouch™ NIBP

22 channels

- 6 internal (Body position, movement, SpO₂, pulse rate, plethysmography, patient marker)
- 2 AUX - up to 8 channels per external connector (e.g.: 3 channel ECG, flow, snore, blood pressure calibration)

Data collection / Data transfer

- Data transfer via Bluetooth, wireless data transfer in realtime
- 12 bit signal resolution
- Individually adjustable recording rate from 4/s to 512/s

Data storage

- internal data storage, 512 MB capacity
- Charging and data transfer via docking station

Size and weight

- 74 x 55 x 16 mm, 58g (incl. battery)

Display

- high resolution, color touch display, resolution 320 x 240 pixels

Power supply

- Li-Ion-battery (rechargeable), up to 26 hrs. recording duration

Analysis software DOMINO light

* Patent numbers: DE 102005014048.3-35, EP 20060001181.4-1526, US 11/364 174 US 2006/0217616 A1, 7374542

** Bilo, G., Parati, G. et al., Validation of the SOMNOtouch™ NIBP non-invasive continuous blood pressure monitor according to the European Society of Hypertension International Protocol revision 2010. Blood Pressure Monitoring. 2015

*** Dick, R., et al., AASM standards of practice compliant validation [...] Physiological measurement, 2010. 31(12): p. 1623-33