

SOMNOtouch™ RESP

Cardiorespiratory Screening in the size of a credit card



- Smallest screener on the market
- High resolution touch screen
- 10 channels integrated in main unit, allows easy application and maximum comfort for the patient
- Wireless data transfer in realtime
- Continuous Systolic/Diastolic blood pressure (Option)

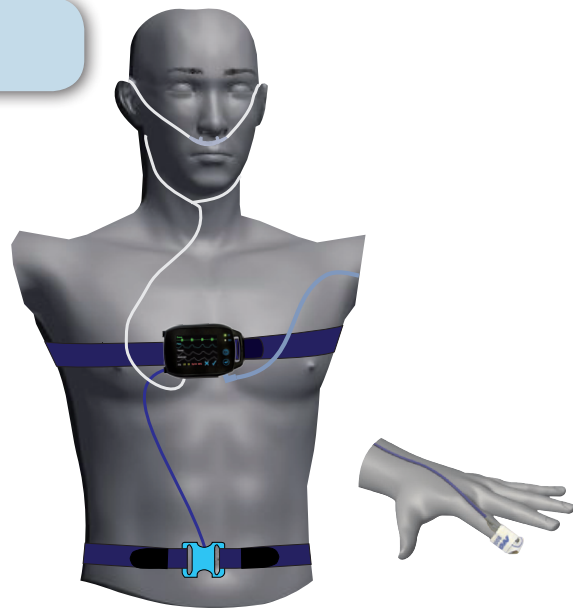
A new generation of polygraphy

Integrated sensors:

- Flow & Snore (nasal cannula)
- Effort - Thorax & Abdomen
- SpO₂, pulse rate
- Body position
- Movement (for sleep/wake estimation)
- CPAP/BiPAP pressure

External sensors:

- AUX-connection for extended recordings e.g. PLM, ECG, EEG, EOG, EMG



Online signal check on tablet PC or mobile phone

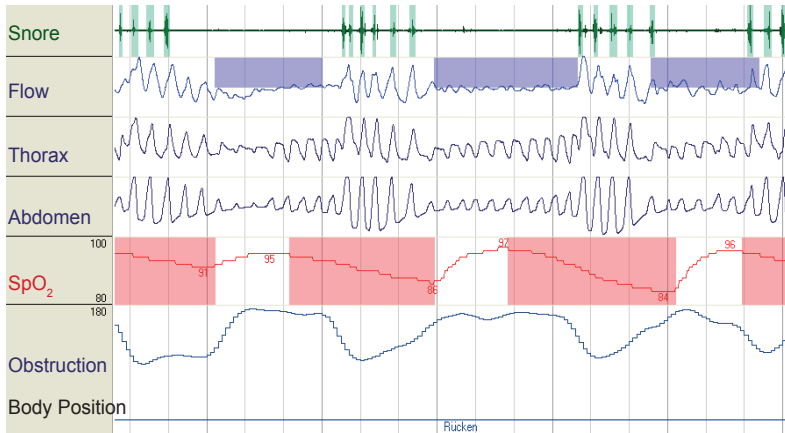
MobileCheck

Sends a screenshot of the recording for a signal check to your mobile phone - no matter where you are.

Transfer times and periods can be programmed individually.



Data analysis and reports



- Automatic event detection and immediate report printout
- Additional respiratory analysis by (effort-based) phase angle analysis* - autonomous from flow
- Calculation of AHI & RDI
- Manual editing

- Optional:**
- Simplified, ambulatory sleep scoring with combi electrode (1 EEG, 2 EOG, ambient light)
 - Sleep scoring according to R&K (2 EEG, 2 EOG, 1 EMG)
 - PLM detection
 - Blood pressure determination through ECG (via Pulse Transit Time, PTT)**

- Reports**
- Automatic detection of artifacts
 - Standard or user defined reports

SpO₂ report, respiratory report, snore report, sleep/wake report

| O2 saturation | | |
|------------------------------------|----------------|----------|
| | Number (Index) | Time |
| Number of Desaturations | 428 (65.5) | |
| Minimal SpO ₂ (%) | 85 | 02:49:14 |
| Baseline O ₂ saturation | 96 | |
| Average SpO ₂ | 95 | |
| Number < 90 % | 145 | 13.5 % |
| Number < 80 % | - | 0.0 % |
| Time < 90 % | 6,6 % | 00:25:44 |
| Biggest Desaturation (%) | 14 | 03:03:01 |
| Average Desaturation Time (s) | 19,0 | |
| Longest Desaturation (s) | 90,2 | 03:55:17 |
| Average Min. Desaturation | 91 | |
| Deepest Desaturation (%) | 85 | 02:49:14 |
| Sum all desaturation | 02:15:26 | 34,6 % |
| Average SpO ₂ Delay (s) | 8,9 | |
| Artifact (min) | - | |

Respiratory Analysis

| | Number (Index) |
|--------------|----------------|
| Obstructive | 135 (20.7) |
| Mixed | 89 (13.6) |
| Central | 93 (14.2) |
| Under A... | - |
| Total Aph... | 317 (48.5) |
| Hypopnoea | 114 (17.5) |
| A+H | 431 (66.0) |
| Limitations | - |
| RDI | 431 (66.0) |

| Position | Supine | not Supine | Left | Right | Prone | Upright |
|--------------------------|------------|------------|------|-------|-------|---------|
| Sleep Time Fraction (%) | 100,0 | - | - | - | - | - |
| Total Events (Index) | 431 (66.0) | - | - | - | - | - |
| Obstr. Apnoea (Index) | 135 (20.7) | - | - | - | - | - |
| Central Apnoea (Index) | 93 (14.2) | - | - | - | - | - |
| Mixed Apnoea (Index) | 89 (13.6) | - | - | - | - | - |
| Hypopnoea (Index) | 114 (17.5) | - | - | - | - | - |
| Flow Limitations (Index) | - | - | - | - | - | - |

Snore Analysis

| | All | Prone | Supine | Left | Right | Upright |
|---------------------------|-----------|-------|-----------|------|-------|---------|
| Snore (Index) | 80 (12.3) | - | 80 (12.3) | - | - | - |
| Absolute Snore (min) | 0,8 | - | 0,8 | - | - | - |
| Snore Episodes (min) | 0,6 | - | 0,6 | - | - | - |
| Snore Eps. (% Sleep Time) | 0,1 | - | - | - | - | - |

Sleep Stages

| | 22:17 | 23:00 | 00:00 | 01:00 | 02:00 | 03:00 | 04:00 |
|----------------------------|----------|-------|-------|-------|-------|-------|-------|
| W | | | | | | | |
| R | | | | | | | |
| N | | | | | | | |
| NR | | | | | | | |
| WONREM | | | | | | | |
| NQUREM | | | | | | | |
| Total Sleep Time (TST) | 06:31:50 | | | | | | |
| Sleep efficiency (%) | 97,8 | | | | | | |
| Sustained Sleep Eff. (%) | 97,8 | | | | | | |
| Sleep Latency | - | | | | | | |
| Total Sleep period (SPT) | 06:40:50 | | | | | | |
| Sleep Stage Change (Index) | 4 (0,6) | | | | | | |
| # Wake (Index) | 2 (0,3) | | | | | | |

Datasheet SOMNOtouch™ RESP

26 channels

- 10 internal (Body position, movement, SpO₂, pulse rate, plethysmography, internal effort, pressure/flow sensor, CPAP-pressure sensor, snore, patient marker)
- 2 AUX - up to 8 channels per external connector (e.g.: 2 PLM, ECG, EEG, Combi electrode (1EEG, 2 EOG, ambient light), R&K sleep scoring (2 EEG, 2 EOG, 1 EMG), effort abdomen, RIP optional)

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 256/s

Data recording

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

Size and weight

- 84 x 55 x 18 mm, 64g (incl. battery)

Display

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

Power supply

- Li-Ion-battery (rechargeable), up to 12 hrs. recording duration

Analysis software DOMINO light

* Method and device for monitoring the respiration.
Patent Number: DE 10 2007 035 549

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



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