

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)

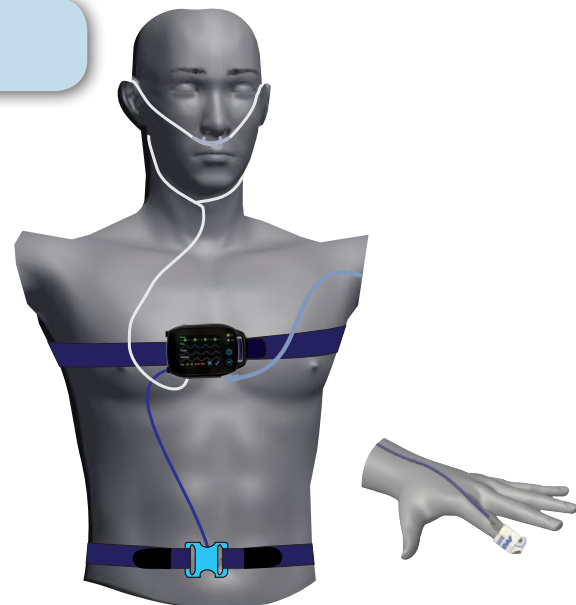
A new generation of polygraphy

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

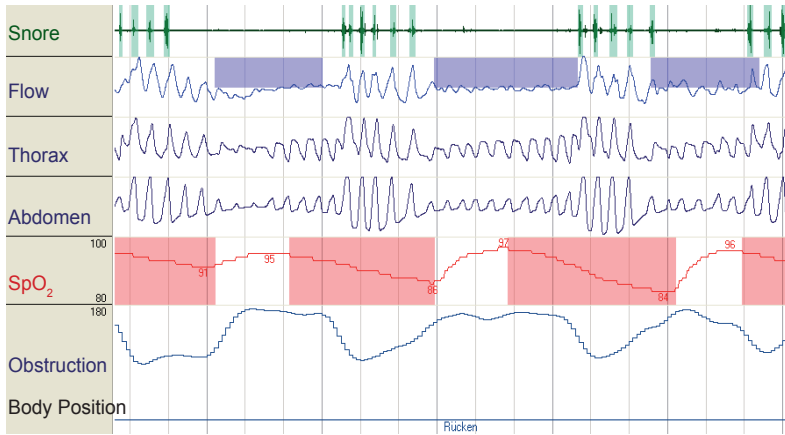
MobileCheck

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



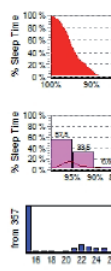
- Automatic event detection and immediate report printout
- Additional respiratory analysis by (effort-based) phase angle analysis* - autonomous from flow
- Calculation of AHI & RDI
- Manual editing

- 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 SpO2 (%)	85	02:49:14
Baseline O2 saturation	96	
Average SpO2	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 SpO2 Delay (s)	8,9	
Artefact (min)	-	



Respiratory Analysis

Number (Index)	
Obstructive	135 (20,7)
Mixed	89 (13,5)
Central	93 (14,2)
Under A.	-
Total Apn.	317 (48,5)
Hypopnoea	114 (17,5)
A+H	431 (66,0)
Limitations	-
RDI	431 (66,0)

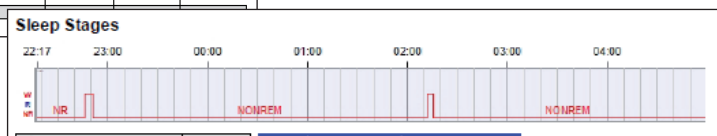
Apnoea (Index)	Hypopnoea (Index)	AHI (h)	Flow Limitations (Index)
98	78	78	-
25,5	24,1	24,1	-
-	-	-	-

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 (mm)	0,6	-	0,6	-	-	-

Snore Epls. (% Sleep Time)

0,1

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 (13,5)	-	-	-	-	-
Hypopnoea (Index)	114 (17,5)	-	-	-	-	-
Flow Limitations (Index)	-	-	-	-	-	-



Total Sleep Time (TST)	06:31:50	Sleep stage	Duration	(%) TIB
Sleep efficiency (%)	97,8	Artefact	-	-
Sustained Sleep Eff. (%)	97,8	Wake	00:09:00	2,2
Sleep Latency	-	Sleep	06:40:50	97,8
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, SpO ₂ , 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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