

SleepDoc Porti® 8

Custom Made Sleep Diagnosis

For more than 30 years Dr. Fenyves and Gut have established themselves as leading pioneers in medical diagnosis. With the new SleepDoc Porti 8 they have made sleep screening easier and more efficient.

Modular system – the Porti 8 caters for all. From a simple ambulatory screening device to a complete PSG application with up to 38 channels.

This small ergonomic device has been designed for optimum patient comfort and can be easily applied by the patient.

All hardware and signal recording components are integrated in the device therefore well protected against damage.

Signal recording is obtained by means of simple, reliable and inexpensive sensors, making the SleepDoc Porti systems **very easy to use** and **exceptionally economical** for the Consultant and Sleep lab.

Standard Equipment

The standard Porti 8 has 10 channels for recording the following:

- **Respiration**
Respiratory flow is measured by the internal pressure sensor via a low-cost flow prong.
- **Thoracic Effort**
Chest wall movement is measured by pressure pads integrated in the chest belt (no circuitry!)
- **Abdominal Effort**
Abdominal movement is measured by a pressure pad integrated in the abdomen belt (again no circuitry!)
- **SpO2 Saturation**
Oxygen saturation is measured by the integrated pulse oximeter using the durable, soft-tip finger sensor.
- **Pulse Frequency**
Internal pulse oximeter and finger probe.
- **Pulse Wave**
Internal pulse oximeter and finger probe.



SleepDoc Porti®8 – well protected in the bag

- **Snoring**
External microphones are not necessary with the Porti 8. An internal microphone records breathing sounds via the flow prong.
- **Position**
Body position is identified by an internal magnetic sensor.
- **Light Sensor**
The internal light sensor allows continuous monitoring of brightness of the sleeping environment.
- **CPAP-Pressure**
Absolute pressure is obtained via an integrated pressure sensor which can be directly connected to the patient CPAP/BIPAP interface or tubing.

Optional Modules

For the extentional use in private practice and clinics the following Options are available:

- 2 x Leg movement (EMG)
- 6 x ECG
- PTT
- Systolic blood pressure
- NeuroPort
- 6 x EEG
- 2 x EOG
- 1 x EMG
- 8 x External channels
- Audio/Video

Competitive Screening – economical and efficient

Signal measurements are obtained via simple and inexpensive sensors specially developed for ambulatory sleep diagnosis which are reliable, well-proven and have been used for many years in clinical applications.



Reliable, robust sensors specifically developed for ambulatory sleep diagnosis.



Robust colour coded connectors.

Exclusive, flexible software included

- Full automatic diagnosis and evaluation
- Easy configuration of raw data and final reports.
- Automatic report generation in a matter of seconds
- Network Integration (multiple users)
- HL7 Interface (optional)
- Data import and export via the internet
- Continuous software maintenance and development with free updates.



Technical Data

Dimensions	35 mm x 75 mm x 168 mm (M x W x L, without bag)
Weight	260 g incl. storage battery, without bag
Casing	Metallised plastic (polystyrol, UL 94 HB)
Temperature range	+ 15°C...+ 45°C
Humidity	60 % – 80 %
Storage capacity	min. 12 hours, optional several days
Fault indicator	2 LEDs on front of the device
Power supply	Rechargeable Li-Ion storage battery 3.0V with built-in power supply
Charger	plug-in power supply with medical approval
Output	USB interface with cable for data transmission
Video/Audio-signal	Axis-Camera with integrated microphone and infra red spot; data transmission via Ethernet, camera control (e.g. zoom, turn, resolution...) via user interface in software
Online operation	In online operation with a patient, an optical waveguide to the PC is indispensable (option)

Registered Parameters

Breathing	Differential pressure measurement via flow prong (with adaptor also during CPAP therapy)
Thoracic effort	Differential pressure measurement on thorax by means of rubber cuffs built into chest strap
Abdominal effort	Differential pressure measurement on the abdomen by means of rubber cuffs built into the abdominal strap
Snoring	Phonometric transducer via flow prong
Saturation SpO ₂	Built-in pulseoximeter SpO ₂ measurement range: 80 % – 99 % ± 2 % SpO ₂ 60 % – 79 % ± 4 % SpO ₂ Pulse measurement range: 50 1/min – 150 1/min ± 2 % special rubber-coated thimble finger sensor
Pulse	Plethysmogramm display; measurement via fingersensor
Position	Magnetic sensors for position recording
Light	Photometric measurement and light-intensity display
CPAP/ Bilevel-pressure	Differential pressure measurement directly on CPAP mask Measurement range: 0 cm H ₂ O – 45 cm H ₂ O ± 5 %
Leg EMG	Measurements of muscular actions (EMG), separate recording for left and right leg (option); connection of electrodes via DIN safety plug
ECG	6 channel lead via adhesive electrodes (option) Measurement range: 30 1/min – 200 1/min ± 2 %
PTT	Recording of Puls Transit Time PTT Measurement range: 100 – 355 ms ± 4% (Option)
Blood pressure	Measurement range: 60 mmHg – 315 mmHg ± 4% (option)
NeuroPort	Special electrode for frontal lead with full automatic sleeping stage, classification via neural networks (option)
EEG	6 channel lead via adhesive electrodes (option); connection with electrodes via DIN safety plug
EOG	2 channel lead of eye movement for left and right eye via adhesive electrodes (option); connection with electrodes via DIN safety plug
EMG	1 channel lead of muscle movement (EMG) from chin (option), connection with electrodes via DIN safety plug
External	External box with voltage input (RJ45; 0... 2.5 V) for up to 8 external channels with galvanic separation and RJ45-jack