

SleepDoc Porti® 7

Custom Made Sleep Diagnosis

For more than 35 years Dr. Fenyves and Gut have established themselves as leading pioneers in medical diagnosis.

Following the success and renowned reputation of the SleepDoc Porti 6, we are proud to announce our latest addition to our diagnostic range of products, SleepDoc Porti 7.

With 10 basic channels, and additional 'user friendly' features the Porti 7 sets the standard for ambulatory Sleep screening!

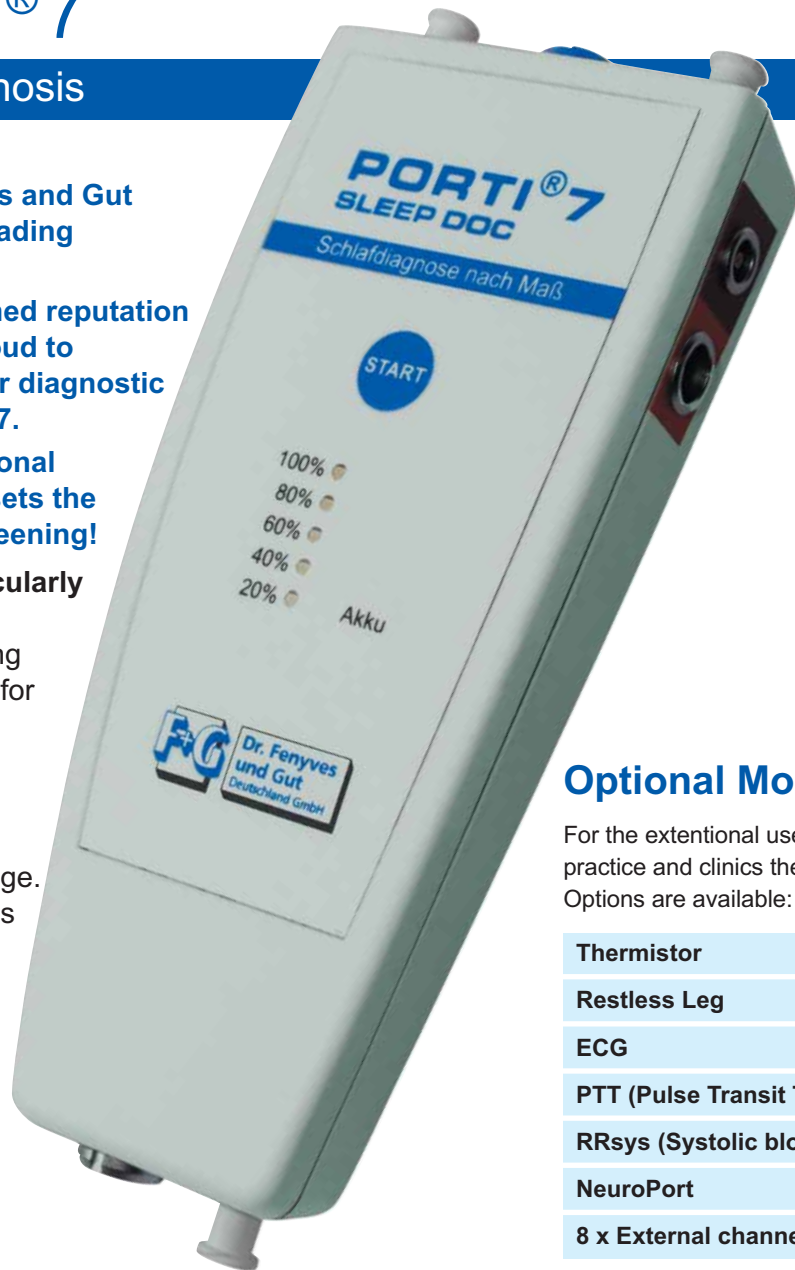
This small ergonomic device is **particularly suitable for outpatient use** in the identification of sleep-related breathing disorders. Porti 7 has been designed for optimum patient comfort and can be easily applied by the patient.

All hardware and signal recording components are integrated in the device – well protected against damage. Signal recording is obtained by means of simple, reliable and inexpensive sensors, making the SleepDoc Porti screening systems very easy to use and exceptionally economical for the Consultant and Sleep lab.

24 Channels – Great performance!

Already the standard Porti 7 has 10 channels for recording the following:

Flow	Using flow prongs or directly from the patient CPAP interface
Oxygen saturation SpO2	Integrated pulse oximeter with HP finger sensor
Pulse	HP finger sensor
Pulse wave	HP finger sensor
Thorax	Chest wall movement is measured by pressure pads integrated in the chest belt (no circuitry!)
Abdomen	Abdominal movement is measured by a pressure pad integrated in the abdomen belt (again no circuitry!)
Snoring	The built in microphone detects sound via flow prongs
Position	Body position via integrated sensor (5 positions)
Ambient Light	The internal light sensor allows continuous monitoring of brightness of the sleeping environment
CPAP/ Bi-level	Absolute pressure is obtained via an integrated pressure sensor, which can be connected directly to the patient CPAP interface or tubing



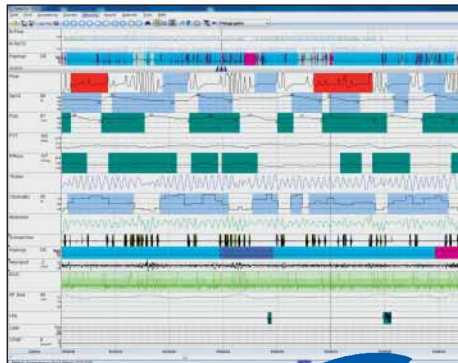
Optional Modules

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

Thermistor
Restless Leg
ECG
PTT (Pulse Transit Time)
RRsys (Systolic blood pressure)
NeuroPort
8 x External channels

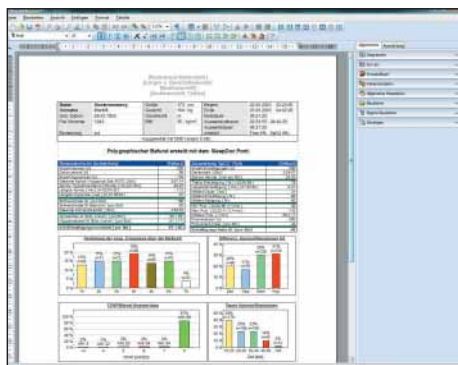
Analysis and Diagnosis Made Easy!

- On screen measurements and results displayed in High resolution



Flexible Software!

- Flexible parameter control for the user
- Full automatic evaluation, diagnosis and report generation



- Manual editing of data / summary reports
- Quick and easy report generator
- Online function for all channels
- Windows 2000, XP, Vista and Windows 7 compatible with network integration (multiple users)
- HL7 Interface (optional)
- Option for data to be sent via email
- **Continuous software maintenance and development with free updates**

Economical

Low running costs due to inexpensive consumables. Marginal time and effort for data evaluation and diagnosis. Optional extended warranty through regular service program.

Functional

High resolution signals. Includes Thorax, Abdomen, CPAP and/or Bi-level measuring. Up to 24 channels with additional modules. Integrated battery display.

Easy to use

Simple operation for patients and nurses. Only 3 sensors and device to apply. (flow prong, finger sensor, thorax and abdomen belt). All other sensors are integrated in the device.

Reliable, robust sensors specifically developed for ambulatory sleep diagnosis:



Inexpensive flow sensor for recording respiration and snoring.



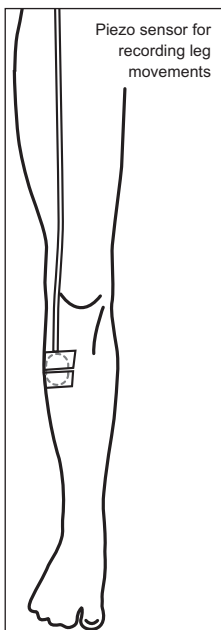
The reusable HP SpO2 sensor finger cuff is durable and comfortable for the patient.



Special electrode for frontal lead with full automatic sleeping stage classification.



Robust, colour coded connectors



Technical specifications

Dimensions	30,5 mm x 62,7 mm x 140 mm (H x W x L, without bag)
Weight	160 g including storage battery, without bag
Housing	metallized plastic (polystyrol, UL 94HB)
Temperature range	+ 15°C...+ 45°C
Moisture	25 % – 95 %
Storage media	Internal flash memory
Storage capacity	min. 48 hours
Fault indicator	2 LEDs on front of instrument
Power supply	Rechargeable Li-Ion storage battery 3.0 V with built-in Semiconductor fuse
Charger	Plug-in power supply with medical approval
Output	USB interface with cable for data transfer
Audio/Video	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 operations	In online operation with a patient, an optical waveguide to the PC is essential (option)

Registered parameters

Respiratory activity	Differential pressure measurement via flow prong (with adaptor also during CPAP therapy), alternative or additional measurement by means of thermistor possible (option)
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 abdomen strap
Breathing sounds	Phonometric transducer via flow prong
SpO2/Pulse	Built-in pulseoximeter SpO2 measurement range: 80 %–99 % ± 2 % SpO2 60 %–79 % ± 4 % SpO2 Pulse measurement range: 50 1/min – 150 1/min ± 2 % Finger sensor: special rubber-coated thimble finger sensor
Pulse wave	Plethysmogramm display; measurement via fingersensor
Position	Built-in Acceleration sensor for position recording (5 positions)
Ambient Light	Photometric measurement and light-Intensity display
CPAP/Bi-level	Differential pressure measurement directly on CPAP mask Measurement range: 0cmH2O – 45cmH2O ± 5 %
Neuroport	Special electrode for frontal lead with full automatic sleeping stage classification via neural networks (option)
Leg movement	Piezo pressure sensor (option)
ECG	One channel lead via adhesive electrodes (option)
Central heart frequ.	Measurement range: 30 1/min – 200 1/min ± 2 % (option)
PTT	Measurement range: 100 ms – 355 ms ± 4 % (option)
Syst. blood pressure	Measurement range: 60 mmHg – 315 mmHg ± 4 % (option)
External channels	External box with voltage input (RJ45; 0..2.5 V) for up to 8 external channels with galvanic separation and RJ45-jack

System Requirements

PC with Microsoft Windows 2000, XP, Vista or Windows 7 (32 and 64 bit), USB port