

EEG

EEG, Video EEG, Longterm, Sleep and Polygraphy System



NEUROWERK EEG

The NEUROWERK EEG system results from the customerfocussed progression of our digital EEG machines within the framework of the NEUROWERK family.

The approved modular hardware and software conception ensures a close adaption that will meet the needs of our customers. In addition to the routine application, the system provides digital video recording, mobile long term monitoring with the assistance of our ultra light-weight EEG/Polygraphy recorder, bedside monitoring with a miniaturized tablet PC





Option: NEUROWERK EEG mobile with EEG recorder and tablet PC as EEG monitor ↑

MODEL – NEUROWERK EEG mobile

NEUROWERK EEG mobile is a truly comprehensive 16 channel EEG device designed for mobile usage. Composed of a 170 g lightweight amplifier/recorder system and an ultra small WINDOWS XP Tablet PC, its power independence ensures it can be used when you do not have access to a power socket.

- → System comprising 16 EEG or 16 poly channels
- → Integrated flash card drive to enable long term data storage
- → Totally battery operated
- → WINDOWS XP compatible Ultra Mobile PC in paperback format
- → Touch screen operation procedure
- → NEUROWERK EEG patient and EEG database, EEG recording/ review/ analyzing software

and – as an extension of our sleep analysis software – top of the range polysomnography.

In all cases, for routine applications, standard EEG review software with spectral analysis and EEG mapping is available. EEGs can be exported to every data volume and reviewed on any PC. User friendly and intuitive handling of the recording and review software combined with the outstanding improvement of the functionality are trademarks of the NEUROWERK family, providing you with more time that you can then focus on your patient, rather than your machine.



Option: NEUROWERK EEG portable (DB 23) with carrying case ↑

MODELS

- → With 23, 36 or 40 channels
- → As routine, EEG or EEG/Polygraphy
- With video extension
- → With long term EEG recorder
- → As EEG extension for the NEUROWERK EMG
- → With desktop PC or notebook
- As portable system with carrying case
- → As mini EEG monitoring system with tablet PC

REVIEW AND ANALYSIS METHODS

- → User friendly EEG amplitude and frequency measurement
- Critical value supervision for 4 channels
- Dynamic amplitude mapping, frequency analysis and power maps for segments that you can select
- Integrated, customer-specific and macrosupported report form
- Printout of selectable EEG segments, EEG analysis segments and analysis results
- → FOC export function for selectable EEGs that includes review software for EEG reviews on any PC
- → Compressed Spectral Density and amplitude integrated EEG *
- Integration of foreign analysis software through EDF data exchange *
- Video EEG review incorporating video cutting function *
- Polysomnograhy software *

SOFTWARE – Evaluation screenshot ↓



SOFTWARE – Recording screenshot **V**

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## **TECHNICAL DATA**

#### Amplifier

- → DB 36: 40 channels, of which 25 are referential (EEG), 11 bipolar (polygraphy), SaO2 *, Pulse *, HR *, CPAP pressure *
- → DB 23: 23 channels, of which 21 are referential (EEG), 2 bipolar
- → Sampling rate: 128, 256, 512 Hz/channel
- → A/D Conversion: 16 bit
- → Resolution: 0.125 µV
- → Noise: < 2 µV pp</p>
- → Input impedance: > 20 MOhm
- → CMRR: > 100 dB
- → Notch filter: 50/60 Hz
- → Calibration signal: 1 Hz rectangle/10 Hz sine wave
- → Power supply: 6 VDC (medical grade)

#### **Photic stimulator:**

- → LED flash lamp or Xenon flash lamp * including table clamp or a stand * that can be moved
- → Flash program control through EEG recording software
- → Flash frequency: 1 60 Hz with 1 Hz steps
- → Variable stimulation and pause duration
- → Flash energy: 1.2 Joule

## **GENERAL DATA**

- → User friendly for the operator with a self-explanatory user interface
- → Visual, graphic and numerical presentation of the impedance test, which can also be triggered from the headbox
- → Multiple window design for the presentation of EEG and polygraphy data with different time bases
- → On line EEG review and analysis with clear presentation
- → Unlimited marker and text input, external trigger marker
- Unlimited number of montages
- → Macro control of the EEG recording



Option: NEUROWERK EEG desktop (DB 36) with trolley ↑

## SERVICE

- → Training and further education for physicians and technicians available
- High quality accessories and consumables by simple and reasonable online order
- → 24 hour service provided
- → Can adhere to special requests
- → Integration into an existing system and network possible

## **NEUROWERK CENTER**

All NEUROWERK devices made by SIGMA Medizin-Technik are controlled by the central data management system -NEUROWERK CENTER. Whenever you make an appointment for a patient's examination, this patient will be integrated into your entire system and available for all NEUROWERK examinations. The facility to couple the NEUROWERK CENTER database to your clinic or practice EDP system will create time savings that will benefit both yourself and your patients.



# **NEUROWERK**[°]

- → High Quality products for neurology made in Germany
- → Intuitive user interface combined with highly sophisticated device technology
- → Central data management for all NEUROWERK applications
- → High safety and reliability through a certified quality management system



