

# THERA PRAX<sup>®</sup> MOBILE

## Measuring and Modulating Brain Activity

for therapeutic application



### DC-EEG biofeedback system

The THERA PRAX<sup>®</sup> MOBILE is a biofeedback system supporting patients to learn to self-regulate their brain activity (EEG biofeedback). It is intended to be used for EEG biofeedback with the slow cortical potentials (SCP) protocol in the treatment of children with attention-deficit/hyperactivity disorder (ADHD).

In addition, the THERA PRAX<sup>®</sup> MOBILE reliably records multi-channel EEG, ECG, and EMG signals as well as peripheral biosignals to describe psychophysiological correlations during relaxation or a stressful situation. To individually control the progress of therapy, cognitive evoked potentials can be recorded.

Due to the very close cooperation with leading scientific institutions in the field of biofeedback, our devices incorporate the latest medical research results.

### Advantages of the THERA PRAX<sup>®</sup> MOBILE:

- training of the slow cortical potentials (SCP)
- standardized, clinically evaluated protocol for SCP biofeedback with automatic online correction of artifacts and eye movements
- biofeedback training with pulse, temperature, breathing, EMG, pulse curve, GSR

## About EEG biofeedback

Biofeedback is a computer-aided method in which parameters of the patient's body are measured via sensors and transformed into visible or acoustic signals on a computer screen. It is well accepted in psychology as a method of operant learning and is used in behavioral therapy.

EEG-biofeedback visualizes normally unperceivable brain activity on a display and the patient learns how this activity can be influenced in a systematic manner.

The method is used in the treatment of children aged 7 to 9 with attention-deficit/hyperactivity disorder (ADHD) for reduction of core symptom severity.



electrodes for the  
online correction of artifacts  
during SCP biofeedback

## THERA PRAX® MOBILE Features

- portable full-band DC-EEG biofeedback system
- complete system consisting of a 13-channel full-band DC-EEG amplifier, a mobile PC with integrated 15" TFT colour display, software for biofeedback and analysis, keyboard, mouse
- feedback of the slow cortical potentials (SCP) with online correction of artifacts and eye movements
- EEG biofeedback with frequencies and ratios
- free choice of frequency band, algorithm and combinations of the two (ratio, arithmetics, correlation, coherence, bicoherence etc.)
- audio-visual feedback and animation
- free choice of feedback channel (unipolar, bipolar, source, multi-channel)
- biofeedback with EMG, ECG and corresponding signals, e. g. heart rate
- analysis of single session and comparison of multiple sessions
- patient database with medication and examination calendar, complete documentation of readings

## THERA PRAX® MOBILE Specifications

- Full-band DC-EEG and biosignal amplifier
- 24 bit resolution per channel
- selectable sample rate of 32 to 4,096 sps
- frequency range of 0 to 1,200 Hz depending on sampling rate
- power supply via replaceable, rechargeable batteries
- continuous operation time > 8 h
- data transmission using optical cable

Please visit [www.neurocaregroup.com](http://www.neurocaregroup.com) for detailed technical specifications.

## THERA PRAX® MOBILE Options

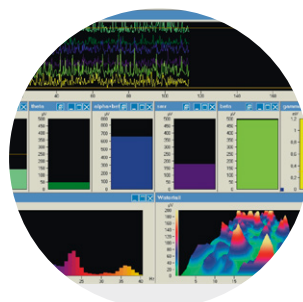
- module to correct EEG artifacts (blinking, eye / body movement) in real time
- module for cognitive evoked potentials: CNV, P300, ERN, readiness potential
- secondary monitor for the patient
- advanced Analyzer: module for the detailed analysis of the therapy of an individual patient or groups of patient
- biofeedback with breathing, temperature, GSR, pulse curve
- trolleys for the save and comfortable transportation



therapy with  
SCP biofeedback



monitor for the patient showing  
the SCP-Biofeedback application



biofeedback with  
frequency bands