

## Sleep signals recorder "ApnOx"

A portable screening respiratory system with pulse oximetry for diagnosis of obstructive sleep apnea

Type IV AASM\*



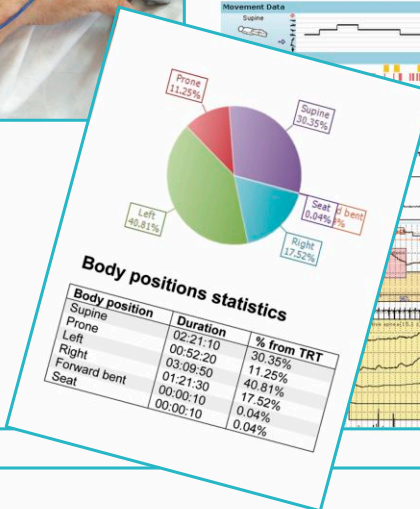
CPAP\*\*

4 channels record the following parameters:

- oxygen saturation SpO<sub>2</sub>;
- photo-plethysmogram;
- pulse rate;
- perfusion index;
- pressure airflow;
- respiratory rate;
- respiratory amplitude;
- snore;
- body position;
- body movements.

After completing study, reports on sleep statistics are generated on the basis of automatically selected events:

- apnea;
- hypoapnea;
- critical SpO<sub>2</sub>;
- desaturation;
- body movement;
- autonomous arousal;
- tachycardia and bradycardia (by PR).



Home sleep testing

## Polysomnograph for cardiorespiratory disorders analysis

Type III AASM\*

Psychophysiological telemetric system "Rehacor-T" with "Encephalan-PSG" software for somnological studies, "Basic" suite



ABP-4

The screening system recording a small number of signals (7-13 channels in various combinations) with function of data recording onto a memory card in autonomous mode.

The system is used for respiratory (apnea screening) and cardiorespiratory monitoring in hospital, laboratory or at home.

The sales package includes autonomous patient transceiver-recorder ABP-4, wireless pulse oximeter module, other modules, electrodes and sensors.

Additionally to the functional capabilities of the "ApnOx" recorder, there is an option of making reports on sleep statistics based on automatically detected sleep events:

- central apnea;
- obstructive apnea;
- extrasystole;
- tachycardia and bradycardia (by ECG);
- mixed apnea;
- limbs movement.

Home sleep testing  
Ambulatory polysomnograph

Each of polysomnographs can be supplemented with mobile or stationary kit of equipment for **synchronized video monitoring** with "Encephalan-Video" software.

\*AASM – American Academy of Sleep Medicine  
\*\* CPAP – Constant Positive Airway Pressure.  
The polysomnographs by Medicom MTD can control the performance of CPAP therapy as well.

## Laboratory-based or ambulatory (mobile) polysomnographic system

Type II AASM\*

Electroencephalograph-recorder "Encephalan-EEGR-19/26", modification "Mini" (AT-Somno, AT-Somno-Video versions) with "Encephalan-PSG" software for somnological studies, "Maximum" suite

A system with an increased number of channels (18-24), including up to 6 EEG channels, provides tele-metric and autonomous record of physiological signals using autonomous patient transceiver-recorder **ABP-10**, wireless pulse oximeter module, other modules, electrodes and sensors. This system provides the same functionality for cardiorespiratory disorders analysis as the polysomnograph based on "Rehacor-T" (type III).

ABP-10



"Encephalan-PSG" software displays brain rhythms power indices, EOG and EMG amplitude, parameters of respiration, movements, snoring and ECG in a form of trends for quick search of EEG patterns, identification of sleep stages, as well as for manual and automatic hypnogram building, and analysis of various sleep disorders.

"Encephalan-PSG" software provides automatic calculation of such additional sleep statistical parameters by EEG as:

- total sleep time;
- sleep stages duration;
- sleep efficiency;
- sleep latencies and stages latencies;
- number, index and duration of EEG arousals;
- number and duration (WASO) of awakenings.

## Laboratory-based (stationary) polysomnographic system

Type I

Electroencephalograph-recorder "Encephalan-EEGR-19/26", main modification (AT-PSG, AT-PSG-Video, AT-PSG-Video-Poly versions) with "Encephalan-PSG" software for somnological studies, "Maximum" suite

Polysomnographs of type I are characterized by an increased number of EEG channels (over 20) to diagnose sleep related forms of epilepsy and other neurological diseases.

The polysomnographs are suitable both for stationary application in expert class sleep laboratories and for mobile application.

The sales package includes autonomous patient transceiver-recorder **ABP-26**, wireless pulse oximeter module, other modules, electrodes and sensors.

Polysomnograph's software additionally provides analysis of multichannel sleep EEG, detection of epileptic patterns and classification of spike-waves in relation to sleep structure using various methods of EEG quantitative analysis.

Kits of video equipment with "Encephalan-Video" software provide visual analysis of paroxysmal activity and symptoms of sleep disorders synchronously with electrical brain activity that is crucial in differential diagnosis of epilepsy.



ABP-26



Automatic and manual scoring of sleep and associated events



**MEDICOM MTD**

Research & Development Limited Company

Frunze Str., 68,  
Taganrog,  
Russia, 347900

Phones: +7 (8634) 62-62-42, -43, -44, -45  
Fax: +7 (8634) 61-54-05  
e-mail: office@medicom-mtd.com



FM 538691



MD 540857



www.medicom-mtd.com  
www.reacor.ru