



aEEG / CFM
neonatal monitoring

www.elmikomedical.com

What is the EEGDigiTrack CFM device used for?

EEG DigiTrack CFM device enables continuous monitoring of EEG from the left and the right hemisphere and evaluation of the brain's condition during events such as desaturation, bradycardia, tachycardia, convulsions, arousal and other EEGDigiTrack CFM monitors the EEG recording during treatment of convulsions, metabolic or breath disorders etc. take occur in intensive therapy.

Recommendations for CFM monitoring

- evaluation of Central Nervous System functions,
- start of hypothermic treatment and monitoring during hypothermia
- convulsions and convulsions treatment effects,
- premature birth - it is recommended to monitor all patients who at birth weight less than 1,500 g,
- perinatal hypoxia,
- monitoring development, evaluation of recording acceleration,
- meningitis,
- hydrocephalus,
- monitoring central nervous system during serious viral infections (cytomegalovirus, toxoplasmosis)

Advantages of EEGDigiTrack CFM monitoring

- lower number and severity of early and late neurological complications in intensive therapy
- possibility to monitor the effects of convulsion treatment
- EEG monitoring during hypothermia
- shorter hospitalization and treatment costs due to lesser number and severity of complications in intensive therapy
- larger percentage of survival of premature infants with low and extremely low birth weight
- improved comfort for intensive care patients
- possibility to optimize medical treatment in intensive treatment wards

Why should you choose EEGDigiTrack CFM?

- experienced EEG manufacturer since 1978
- the lowest price on the market
- unique automated color coding of medical events (EpiLa, Burst-Suppression, Depression and Normal)
- a lot of useful modules as videoCFM, mapping, CSA/DSA, TPM, FFT analysis, SpO2/HR monitoring
- fully networking system (HL7 compatible)
- free software updates

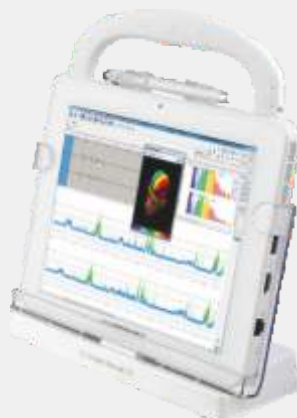


3-channel EEGDigiTrack CFM unit installed on the medical computer and medical cart

Family of devices includes the most advanced equipment for neurological and cardiological monitoring **currently available!**



EEGDigiTrackCFM
on medical tablet



EEGDigiTrackCFM
on medical tablet in
docking station



EEGDigiTrackCFM
installed all-in-one on Cybermed
medical computer

Discover new EEGDigiTrack CFM unique features:

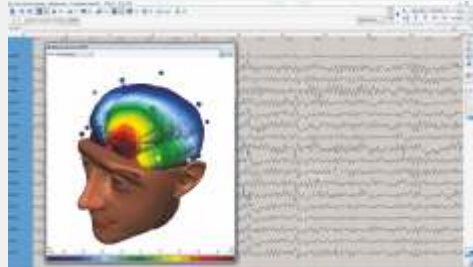
- modern EEG CFM headbox (2, 3, 4, 5- channels) with EEG, ECG, saturation and heart rate measuring
- a new, touchscreen-adapted, exceptionally user-friendly user interface
- completely new networked, dispersed, multi-station EEGDigiTrack Manager database automatically synchronises examinations, descriptions and other data with any computer, eliminating the need for a data server
- on-line impedance measurement, clear in-examination impedance presentation as a recording-integrated map or curve
- ability to define alarms for saturation, heart rate, amplitude and electrode impedance
- advanced CSA and DSA analyses, able to present 3D maps in on-line and off-line mode
- FFT analysis, able to present a variety of graph visualisations or numerical data
- extensive medical events database with over 400 pre-defined positions
- innovative feature of electrode montage selection before the examination with "starting tiles"
- optional multi-camera videometry with optical and digital zoom to monitor your patient on several feeds at once
- ability to create interactive notes and inserting markers during monitoring
- Possibility of analyzing any chosen fragment of EEG record from left or right hemisphere in terms of frequency of individual waves, determining dominant wave and wave voltage within specific frequencies
- unique feature of automatic recording colouring in regard to registered voltage (Normal, EpiLa, Burst-Suppression, Depression)
- ability to simultaneously monitor cardio, SpO2 and plethysmography
- HL7 standard compatible with the ability to create plug-ins for individual users
- incredible flexibility in equipment configuration

EEGDigiTrack CFM

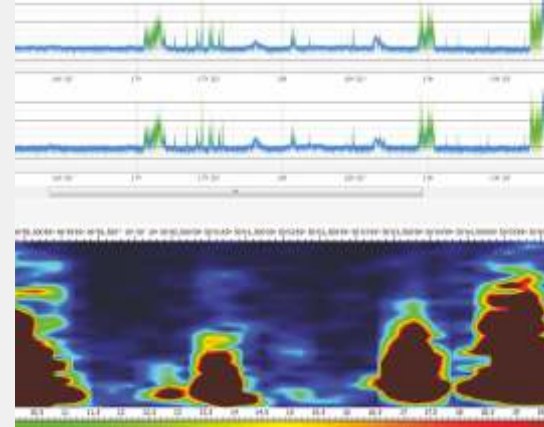
additional modules



Network cameras for videoCFM module



3-D mapping



Signal analysis screen: EEG/CFM/DSA

Advanced software and configuration flexibility makes the EEGDigiTrack CFM a **powerful diagnostic tool!**

Learn about capabilities and unique functions of EEGDigiTrack CFM software!

1/2

A video-CFM

A video-CFM monitoring module is a necessity in clinical practice and allows the user to monitor their patient during examinations. High quality image from a modern AXIS camera is fully synchronized with EEG recording, so the doctor has a full perspective on clinical events occurring during examinations. The camera can be fixed anywhere making the device fully mobile. Additionally, it is possible to install an advanced dome camera that is remote controlled and able to record in complete darkness, fixed on a stand, wall or ceiling.

3D mapping module - numerous 3D visualisation algorithms

3D mapping module generates and presents the map's projection onto a 3D head or brain model. Advanced algorithms and numerous transformations like Surface Current Density, Coherence Mapping, Potential Change Velocity, Relative and Absolute Power Spectrum, or Potential Asymmetry Mapping, Dominant Frequency and Centre of Gravity Mapping place our mapping among the world leaders of EEG analysis software.

TPM - Time-Potential Mapping

TPM Mapping is a unique method of brain mapping which supports EEG analysis in everyday medical practice as well as in the scientific and research applications. Thanks to the innovative method of potential changes mapping simultaneously over time and space, synchronization of the time-potential map with EEG signal and with the momentary maps as well as surface current density mapping, it is possible to gain a full clinical picture. It is possible to define various spatial systems.

Networking numerous CFM devices

The EEGDigiTrack CFM device is designed to work in a network of many units. The monitoring conducted with the recording post can be simultaneously analyzed on other networked stations. Unique, networked, dispersed patient and examination database allows for any number of recording and analysis stations, which synchronise data with each other, eliminating the need for an additional server, it is also possible to connect and work with the device remotely (e.g. from another clinic or home).

EEGDigiTrack CFM

additional modules



CSA/DSA on-line analysis

Advanced software and configuration flexibility makes the EEGDigiTrack CFM a **powerful diagnostic tool!**

Learn about capabilities and unique functions of EEGDigiTrack CFM software!

2/2

EEGDigiTrack with CFM module

Our clients already using a EEGDigiTrack device are now an opportunity to expand their device with the CFM monitoring feature. This option will greatly reduce the costs of buying a completely new monitoring device. However, it involves a compromise - routine EEG examinations cannot be conducted during monitoring. We recommend this solution for clients who only occasionally conduct a long-term neurological and cardiological monitoring.

Neurological and cardiological monitoring

The device's headbox can be configured for neurological and cardiological monitoring. In this configuration it is possible to monitor two EEG channels and one ECG channel. Additionally, the device measures blood oxygen level, heart rate and breathing - graphs for these parameters are synchronized with CFM trend.

Alarms

The device includes an automatic alarm feature. If there is a need, an audio signal will inform the personnel about one of the four parameters exceeding the pre-set point - lower saturation, signal amplitude increase or decrease, electrode's ungluing (changed impedance) and heart rate increase. Alarm level settings are fully adjustable. It is also possible to show alarm information panels, with currently measured value and the time of alarm's occurrence and duration.

CSA and DSA analysis

A very wide range of analytical tools can show recording irregularities with Compressed Spectral Array (CSA) and Density Spectral Array (DSA) methods. It is possible to show maps from each channel, both hemispheres and averaged. Both types of analyses can work on-line and off-line and the range of presented data (selection, window, all) is set by the user. The maps are generated in several modes, e.g. separate for each channel, maximum from hemispheres, maximum from whole and averaged.

EEGDigiTrack CFM

configuration



EEGDigiTrack devices adjust to suit your lab's needs.

Suggested configurations

2 or 4 channel device

basic device versions, available as a fixed version (on a cart or medical monitor) or mobile (e.g. a laptop).

3 or 5 channel device

more advanced version that additionally monitors blood saturation and heart rate. Available as a fixed version (on a cart or medical monitor) or mobile (e.g. a laptop).

CFM device with video monitoring

more advanced device that simultaneously monitors a video camera feed. This unique feature allows to see what was happening with the patient while monitoring took place and helps in eliminating errors in recording (e.g. due to external artefacts).

Device on medical cart

most popular configuration Special cart helps in moving the device between patients. Also available with an autonomous battery power.

Device on a medical computer

an offer for intensive therapy wards, where there is no place for the cart near the patient's bed. It is possible to mount the device on the wall.

Device on laptop

a configuration for users appreciating unlimited mobility.

Optional modules

Videomonitoring

with a remote controlled, dome camera or a smaller mobile version that can be fixed anywhere.

Time-Potential Mapping (TPM) module

a unique method of brain mapping which supports EEG analysis in everyday medical practice

3D mapping module

numerous 3D visualisation algorithms.

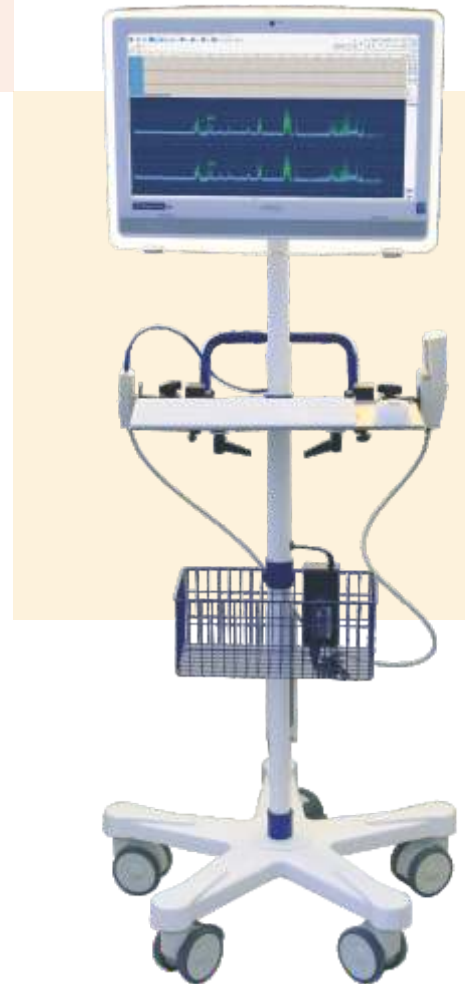
Cart with battery power

allows the user to continuously monitor their patient regardless of the power source

A wheeled case for mobile device transportation

A kit for installing medical computer on a wall

We supply a wide range of accessories and consumables.



5-channel EEGDigiTrack CFM unit installed on the 5 wheel medical cart.

Learn about the EEGDigiTrack CFM amplifier family.

2-channel

3-channel

4-channel

5-channel

About Elmiko

ELMIKO company was created in 1978. For over 35 years we have specialized in designing and developing medical electronics and IT solutions. Regular cooperation with important academic centres resulted in creation of a high-end medical device named EEGDigiTrack. Our highly qualified team of engineers and IT specialists constantly works to develop new solutions and improve the quality and functionality of our devices. Thanks to their effort every few months new versions of devices and software are introduced and the name ELMIKO connotes with the most advanced solutions for medicine.

Our equipment is used by scientific institutes, medical universities, hospitals and private clinics across the world. Moreover, ELMIKO also carries out innovative scientific projects involving biomedical engineering and biological signals digital processing.

ELMIKO also supports education and publishing, popularizing psychiatric and neurological knowledge. and we are proud to have published numerous works of famous scientists. Our most recent publication is the first in Poland official manual for licence trainings for EEG Biofeedback specialists and therapists, published in co-operation with Polish Society of Clinical Neurophysiology.

ELMIKO is the only company in Poland with an accreditation of the Polish Society of Clinical Neurophysiology to conduct trainings for licences for adult and children EEG, EEG for technicians, EMG and EEG BIOFEEDBACK. Moreover, participating in our workshops awards education points and is approved by Supreme Medical Chamber. Our instructors are renowned neurologists and neurophysiologists.

ELMIKO exports its products to many countries across the globe. In addition to producing our own equipment we are also the sole Polish distributor of many world-class medical equipment manufacturers. In order to ensure the highest standard of services, we have implemented ISO 13485:2003 Quality Management System, and successfully passed CE certification for our products.

In recent years ELMIKO has been dynamically developing, today we are a company with a clear vision and a leader on the Polish market for EEG devices. Our experience and highly qualified and professional team guarantee the highest quality of our products. Today, ELMIKO is synonymous with modern technological solutions. We guarantee the highest standards of remote technical support and on-line trainings for our clients working in places across the globe.

Today ELMIKO focuses only on production and research and development. To continuously improve the quality of our services and further widen the range of countries and sectors of activity in 2010 we created the ELMIKO MEDICAL, the sole distributor of all ELMIKO products, which distributes EEGDigiTrack devices across the world.

ELMIKO, ELMIKO MEDICAL and Medical Studies Centre AKSON form the complementary structure of ELMIKO MEDICAL GROUP.

Elmiko Medical Sp. z o.o.

ul. Poleczki 29
02-822 Warsaw
Poland

T: +48 22 855 30 79
F: +48 22 855 34 97
M: +48 606 44 08 08

E: info@elmikomedical.com
W: www.elmikomedical.com

