TruScan® EEG

EEG / EP / LTM | SYSTEM

ADVANCED CLINICAL

ICU SYSTEM

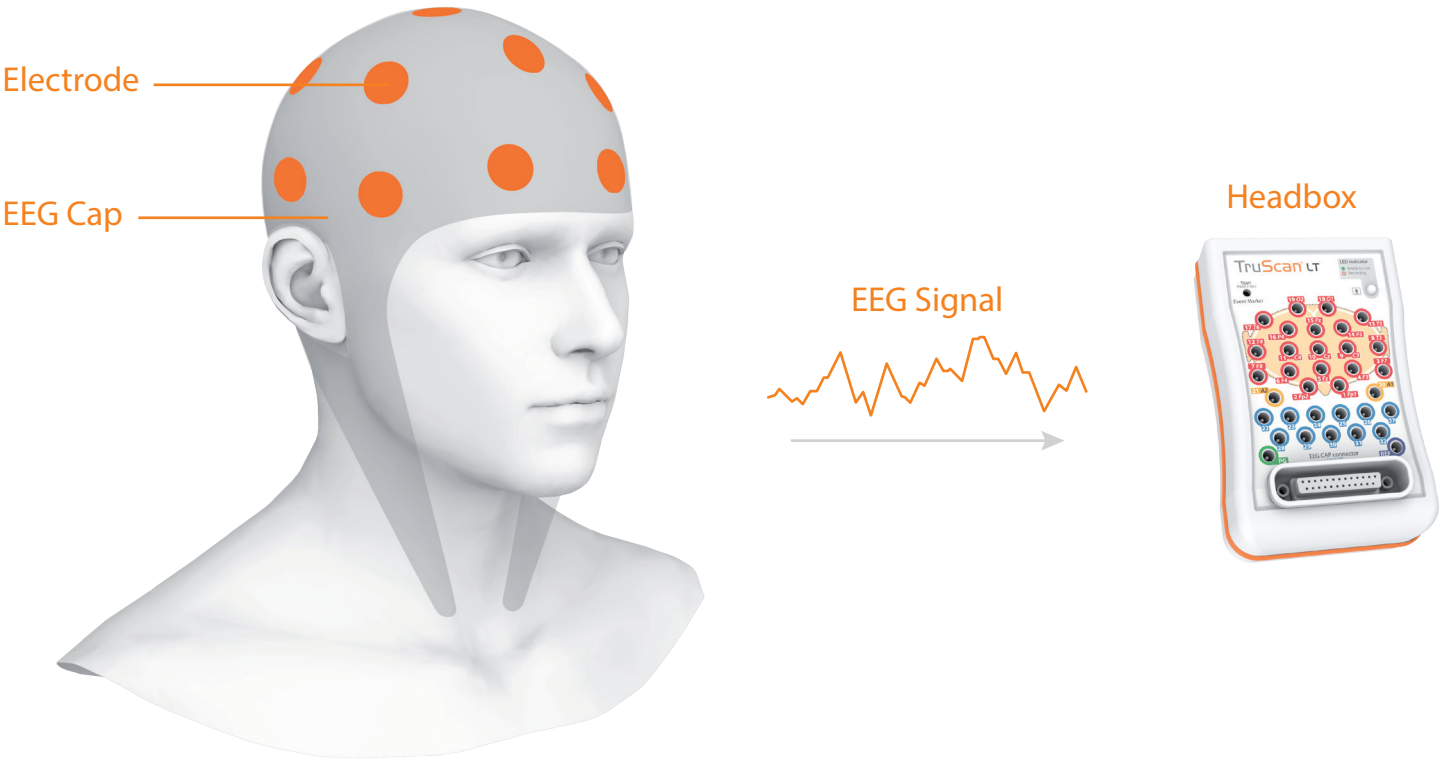
Deymed DIAGNOSTIC

What is EEG?

Electroencephalography (EEG) is non-invasive method to record electrical activity of the brain. Electrodes are placed along the scalp, usually according to the standard placement 10/20 or 10/10. EEG measures voltage fluctuations resulting from ionic current within the neurons of the brain. Clinically, EEG refers to the recording of the brain's spontaneous electrical activity over a period of time, as recorded from multiple electrodes placed on the scalp.

EEG is most often used to diagnose epilepsy, which causes abnormalities in EEG readings. It is also used to diagnose sleep disorders, depth of anesthesia, coma, encephalopathies, and brain death. EEG is valuable tool for research and diagnosis. It is one of the few mobile techniques available and offers millisecond-range temporal resolution which is not possible with CT, PET or MRI.

Derivatives of the EEG technique include amplitude integrated EEG (aEEG)/CFAM spectral array, evoked potentials (EP), which involves averaging the EEG activity time-locked to the presentation of a stimulus of some sort (TMS stimulation, visual, somatosensory, or auditory).



Advantages of TruScan ICU

Deymed manufactures reliable and high-quality neurodiagnostic and neurocare systems. Our goal is to advance the Neurology and Neurophysiology fields to new heights with engineering innovation. All Deymed Neurocare systems are designed for ease-of-use and durability with advanced features that simplify your work.

Battery Operated

Offering the highest signal quality possible and lasting months on a single charge, Deymed systems significantly reduce artifacts and outside noise by running 100% on batteries.

Wireless Use

In wireless mode the amplifier can record for up to 30 hours on a single charge. Wireless range of 100 meters from the base system for maximum patient comfort and freedom to move.

Intelligent Charging

Deymed's new ultra-low capacitance induction charging keeps the batteries full when the headbox is connected to system. This ensures the highest quality signal is possible with full battery operation during sensitive neurophysiology tests.

Optical Isolation

Optical isolation greatly improves signal quality and patient safety. This feature combined with long-lasting battery operation, offers the best-in-class technology for neurophysiological recordings.

Trends and Vital Signs

CFAM/aEEG and spectral array trends, with simple bedside annotating and live view functions. Display and data storage with EEG signal from external Vital Signs monitors.

Always on Impedance

Always-on impedance monitoring displays impedances during recording and has alerts to ensure electrodes are in-range at all times. The values are saved to the EEG file for post quality-assurance review.

INNOVATIONS

TruScan®

Large Full-HD LCD Monitor

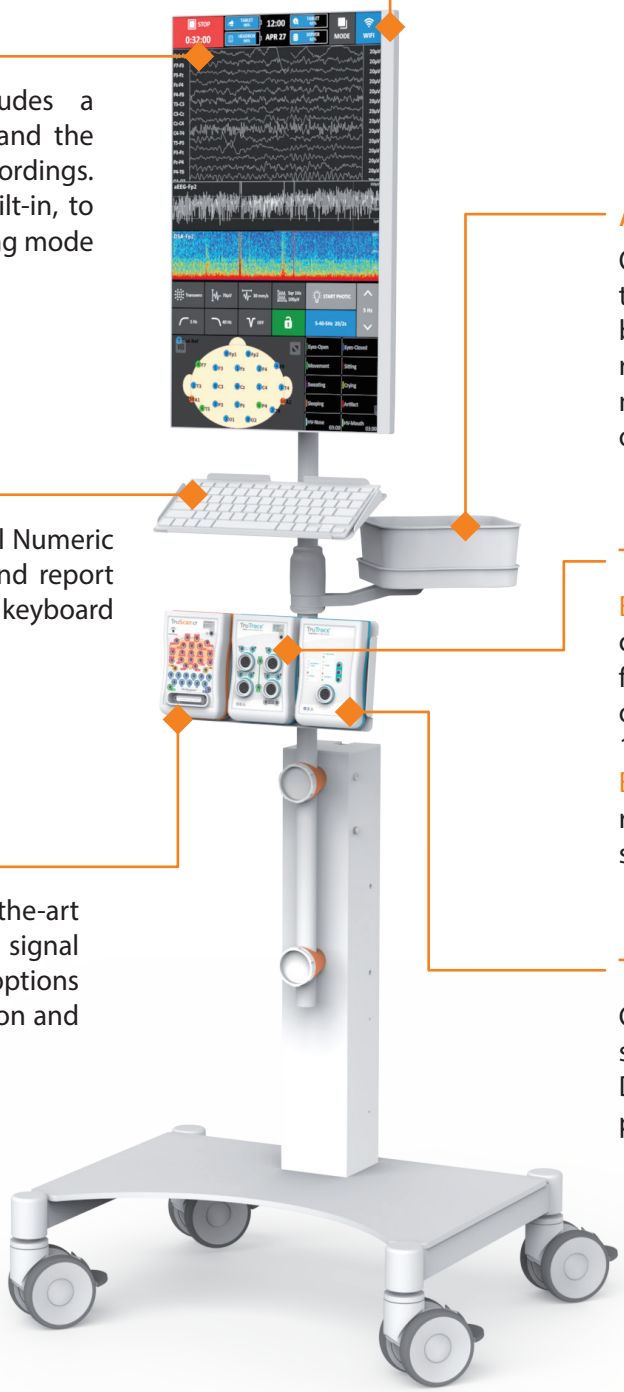
The large, 27-inch Full-HD display offers a detailed view of the recording and all the software features. Of course, it is possible to adjust the height of the monitor and the possibility of turning it in two axes for comfortable operation of the device. There are also larger 27" and 32" monitors available.

Full HD Camera

Portable camera for easy patient monitoring day and night.

Software

Deymed's latest software includes a responsive touch-screen display and the ability to perform full EEG/PSG recordings. Multiple recording modes are built-in, to include; Home mode and Recording mode for routine and ICU applications



Accessories Basket

On the arm of the headbox holder there is a removable container basket that can be used to keep recording supplies or other needed materials for the operation of the device.

Ergonomic Keyboard

Ergonomic keyboard including full Numeric keyboard for fast patient entry and report writing. Optionally, a disinfectable keyboard can be supplied.

TruTrace EMG/EP Headbox

EMG: Each channel offers 5pin DIN connector (that also includes pin for Patient Ground and shielding) or individual Active and Reference 1.5 mm Touch-Proof connector.
EP: Hardware interchangeable reference and active electrodes for simple configuration.

EEG Headbox

TruScan headboxes use state-of-the-art technology offering the highest signal quality combined with advanced options such as click-n'go wireless operation and ambulatory recording.

TruTrace Electro Stimulator

Compatible with variety of stimulation electrodes including Deymed HandyStim for in-hand programmable controls.

CONFIGURATIONS

TruScan®

TabletCart CFAM

Includes TabletCart and Tablet, with 24ch EEG headbox, connected to a USB adapter.

TabletCart ICU

Includes TabletCart and NeuroTablet with 24ch, 32ch or 64ch EEG headboxes. connected to a USB adapter or record wirelessly. Full HD, infra-red, video monitoring built-in.

ICU Cart with Touchscreen Panel PC

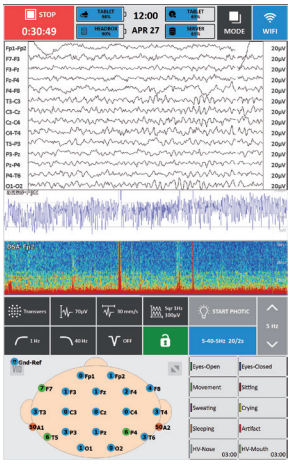
Includes ICU Cart with all-in-one high resolution touch-screen PC, with 24ch, 32ch or 2x32ch EEG headboxes connected to a USB adapter.

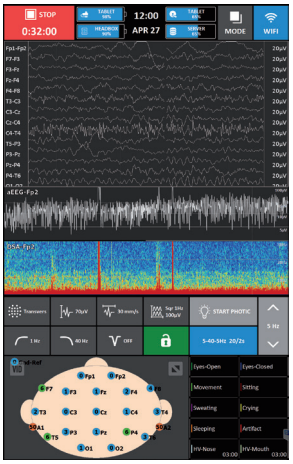
FlexiCart Multi-Modal ICU

Includes FlexiCart with Silent Computer, 24ch, 32ch or 64 EEG headbox, EMG/EP headbox and electric/audio stimulator. Spike and seizure detection software integration options.

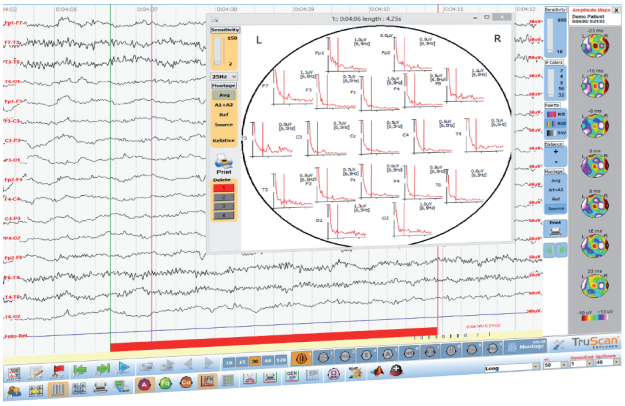
TruScan Acquisition

- Intuitive Dashboard interface
- Pre-set text markers for quick insert
- Integrated patient database and HL7 (optional)
- On-screen always-on impedance monitor
- Visual drag and drop custom montage creation
- View live data and review data with split screen
- EP and Neurofeedback modules
- Patient remote alarm and event trigger
- Live HD video display
- Lockable settings





TruScan Explorer

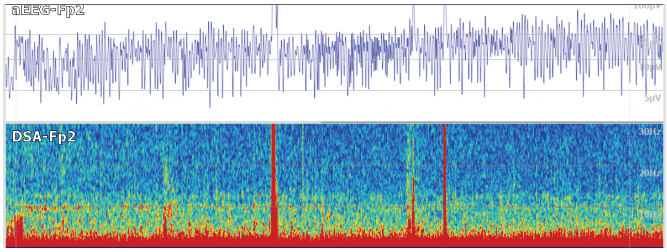


- Full set of review tools including Brain Mapping
- Export EEG with included viewer to flash drive
- Interpretation editor with custom text pre-sets
- Database with un-interpreted To-Do list
- Full search and sortable patient list
- EDF, LORETA, Matlab and Excel output of data
- Spectral Analysis overlay of multiple segments
- Common controls via TruScan control keyboard
- Synchronized frame by frame video with EEG
- EP epoch generator with full post-analysis

Advanced Trend Monitoring

Amplitude-integrated EEG (aEEG) and spectral array (DSA) trends are becoming a standard of care in the intensive care unit for neuromonitoring. With the TruScan ICU systems the following can be recorded in one system:

- Full HD Video
- EEG and advanced trends (aEEG/DSA)
- Continuous impedance monitoring
- Vital Signs integration (optional)
- Evoked Potentials (optional)
- Spike and Seizure detection (optional)



TruScan RS / LT Wireless

The TruScan LT Wireless EEG system can be used for Ambulatory, Wireless, Long Term Monitoring and standard clinical use.

Connected or Ambulatory Mode: In Connected or Ambulatory mode, the TruScan LT system can record up to 45 hours and TruScan RS up to 90 hours on a single charge.

Wireless Mode: In Wireless mode, the TruScan LT system can record for up to 30 hours and TruScan RS up to 40 hours on a single charge.

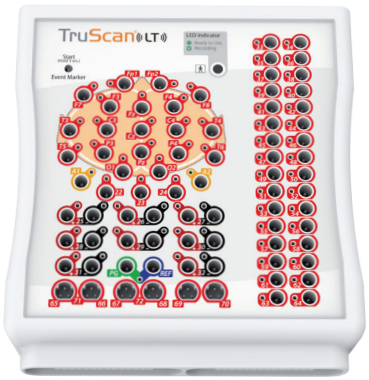
The TruScan LT has a wireless range of 100 meters from the base system. With additional wireless signal extenders this range can be extended to 300+ meters.

When a patient is out of wireless range, the TruScan Headbox will continue to record to internal memory and will automatically re-sync the backup data when the patient comes back into the wireless communication range.

TruScan LT - 24, 32, 64, 72, 128, 256

Numbers of single electrode connectors depends on headbox
1x Easy connect Cap connector
Online Impedance Check
Battery operated - removable batteries
Optional Holter recording to SD card

32ch



72ch LT Plus

24ch

TruScan LT-RS EEG rev TSLTRS-BD211

Deymed
DIAGNOSTIC

DEYMED Diagnostic s.r.o.

Kudrnacova 533

549 31 Hronov

Czech Republic

info@deymed.com

www.deymed.com

+420 491 481 038

Neurophysiology
EMG

Magnetic stimulators
TMS

Epileptology
EEG

Somnography
PSG

Neurofeedback
BFB / qEEG