What is EMG?

EMG (Electromyography) is used in electrodiagnostic medicine for evaluating and recording the electrical activity produced by skeletal muscles. EMG testing has a variety of clinical applications. EMG is used as a diagnostics tool for identifying neuromuscular diseases and disorders of motor control. EMG signals are sometimes used to guide botulinum toxin or phenol injections into muscles. EMG detects the electric potential generated by muscle cells when these cells are electrically or neurologically activated. The signals can be analyzed to detect medical abnormalities, activation level, or recruitment order, or to analyze the biomechanics of human or animal movement.
Advantages of TruTrace EMG

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.

- **Click N’ Go System**: Easily detach your system from the cart with a single click and be on-the-go with a laptop. You are no longer forced to choose between a hospital cart or a portable system. You can now have both in one.

- **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.

- **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.

- **High Sample Rates**: Designed with Digital Signal Processor technology, Deymed systems can sample at very high rates. Parameters can be changed on the fly. DSP offers numerous advantages over standard analog processing.
TruTrace EMG Keyboard

The dedicated keyboard dramatically improves the speed and comfort of acquiring and reviewing EMG data by eliminating tiresome overuse of a mouse. The dedicated keyboard includes all standard EMG controls and almost all on-screen settings are available at the click of a button. Two large scroll-wheels allow for ease of control for sensitivity, scrolling and stimulator intensity settings.

Intelligent Charger

Intelligent Headbox Charger. The Intelligent charging is built into the rotating metal arm with the holder for the headbox. It charges the headbox batteries via inductive charging, ie without direct contact, which maintains the optical isolation and safety benefits of battery operation as well as allowing the headbox batteries to be charged the headbox is connected to system.

Powerful and Silent PC

The Deymed integrated computer is optimized for use in healthcare. Thanks to the absence of a cooling fan, the system runs virtually silent, allowing the exam room to be undisturbed.

Electric Height Adjustable Cart

Option that can change height of the Cart with a push of a button.

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.

Mouse Tray

Extending the workspace of the main desk.

Isolation Power Supply

Medical grade built-in Isolation Transformer that meets the highest medical safety standards. On/off switch with LED indicators for status. Non-patient Grounding plug included on side.

Special developed Cart

Designed with robustness and space in mind, the carts small overall footprint, integral headbox arm and large easy roll wheels means the TruTrace EMG is designed to fit into the most demanding of environments.

INNOVATIONS

Combine with EEG

The TruTrace family can be integrated seamlessly with TruScan EEG.
**TruTrace FlexiCart**

FlexiCart with integrated computer and up to two Amplifier or Stimulator Headboxes.

**TruTrace Traveler**

Laptop and Traveler with click-and-go function for Amplifier and Stimulator Headboxes.

**TruTrace Traveler**

The TruTrace Traveler can be a stand-alone system or as an accessory to your Hospital Cart configuration due to the Click-and-Go portability of Deymed’s battery powered headboxes.

- **Speaker for EMG Signal Sound**
- **Retractable Full Size TruTrace EMG Keyboard**
- **Connectors for I/O Expansion and External Optics to Connect Amplifier and Stimulators via Cable for a more patient-centric approach.**
- **Electro/Audio Stimulator**
- **Detachable EMG Headbox 2/4/8**
MNC, SNC, F, H & Repetitive Studies
- Automatic cursor placement
- Left vs Right comparisons
- On-the-fly changes to test protocol
- Live signal monitor for artifact detection
- Unlimited re-test & return to previous study
- Overlay channel for quick comparison
- Mixed-mode for custom combinations
- Single screen setup for all parameters

Needle EMG & MUP
- Free running or Triggered EMG
- LiveScroll Playback with audio (up to 1 hour)
- Muscle scoring table with quick entry
- Cascade, Stack or Continuous view modes
- Online Multi-MUP for faster categorization
- High resolution view for multiple channels
- Single Motor Unit Analysis
- Turns/Amplitude analysis
- Detailed or Quick Summary Report

Evoked Potentials
- AEP, VEP, P300, SEP, MEP, ERG
- Custom protocol setup
- Auto Superimpose by side, channel or set
- Back-averaging
- Drag signals up and down via mouse
- Post re-filtering of any test
- Advanced artifact rejection algorithm
- Averaging bins for multiple trials
- Reject runs from average on one or all channels

Single Fiber
- Voluntary or Stimulated
- Peak or voltage crossing detection
- Concentric or SF needle options
- Single screen capture and review for ease of use
- Color coded capture for multiple pairs and compare
- Normative values for individual and group
- Fiber Density scoring
- Playback and re-capture of any recorded signal
**HEADBOX OPTIONS**

**TruTrace EMG 2ch, 4ch Headbox**
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. Additionally, includes Patient Ground and Temperature probe Connectors.

2ch Headbox
The most affordable for standard NCS tests.

4ch Headbox
The most common option with 4ch to facilitate an array of EMG investigations.

**TruTrace EMG 8ch Headbox**
More flexible solution. Includes 3 x 5pin DIN connector (that also includes pin for Patient Ground and shielding) and 8 x individual Active and Reference 1.5 mm Touch-Proof connector. Additionally, Patient Ground and Temperature probe TP connector.

**16ch Headbox** option combines two 8ch amplifiers. Second amplifier includes customized label with channel 9 to 16.

**TruTrace EMG 4ch, 8ch EP Headbox**
Designed especially for EP examination. Hardware interchangeable reference and active electrodes for simple configuration. Two EP amplifiers can be combined for 16ch.

**Stimulators**

- **Audio**
  Click, Tone or Pop and programmable audio stimulator. To connect variety of headsets (including in-ear).

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

- **Dual-Electro**
  For configuring advance protocols or convenience of using multiple stimulation positions without need of reconnection.