



NCS/NCV
NERVE CONDUCTION STUDIES



EP
EVOKED POTENTIALS

- VEP
- AEP
- SSEP
- MEP



EMG
SMARTER
ELECTROMYOGRAPHY

- Automated analysis
- Hands-free Auto Mute
- Sierra Navigator



Urology
ELECTRODIAGNOSTICS
IN UROLOGICAL
APPLICATIONS



NMUS
NEUROMUSCULAR
ULTRASOUND



MUNE
MOTOR UNIT NUMBER
ESTIMATION

- MUNIX
- MUNE-MPS
- MUNE-Incr



**Autonomic
Testing**

- R-R interval
- Sympathetic skin
response (SSR)



Chemodenervation
BOTULINUM TOXIN INJECTION GUIDANCE

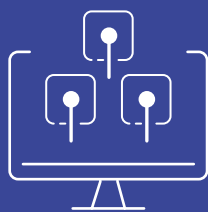


Create to Help.

THE SIERRA SUMMIT® SYSTEM PROVIDES SOLUTIONS FOR:



DIAGNOSTICS



THERAPY



SCIENCE

EMG METHOD

Electromyography (EMG) and nerve conduction studies (NCS) are electrodiagnostic methods used to assess the function of peripheral nerves and muscles. They enable real-time evaluation of the electrical activity of muscles at rest and during contraction, as well as measurement of nerve conduction velocity.

Together with evoked potential studies (EP) and neuromuscular ultrasound (NMUS), these methods form one of the most comprehensive diagnostic tools in neurology and rehabilitation.



APPLICATIONS OF THE SIERRA SUMMIT® SYSTEM

Electrodiagnostic systems combining EMG, NCS, EP, and NMUS are an essential tool in all facilities involved in the diagnosis, treatment, and monitoring of peripheral nervous system and neuromuscular disorders:

- EMG/ENG and clinical neurophysiology laboratories.
- Neurology clinics and specialist outpatient facilities.
- Rehabilitation centres and physical medicine.
- Hospitals and diagnostic centres performing NCS/EP studies.
- Facilities monitoring treatment progress in neuromuscular disorders.

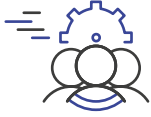


INDICATIONS FOR EMG EXAMINATION

The Sierra Summit® system supports diagnosis and monitoring of:

- **Peripheral nerve entrapment syndromes** - confirmation of lesion localisation and severity, supporting qualification for conservative or surgical treatment.
- **Cervical and lumbosacral radiculopathy** - assessment of nerve root damage, differentiation from peripheral neuropathy and evaluation of process activity.
- **Polyneuropathies** (*diabetic, toxic, inflammatory*) - evaluation of lesion type, extent of changes, and monitoring of treatment progress.
- **Post-traumatic and post-surgical nerve injuries** - determination of lesion level and severity, as well as prognosis assessment.
- **Neuromuscular transmission disorders** - evaluation of neuromuscular junction dysfunction (e.g. in myasthenia gravis).
- **Evoked potential studies (VEP/AEP/SSEP)** - assessment of conduction along visual, auditory, and somatosensory pathways, e.g. in suspected CNS demyelination.





SIERRA SUMMIT® INNOVATIVE FEATURES

- **Exceptional signal quality** - advanced acquisition technology with up to 100 kHz sampling and 24-bit resolution ensures high precision in EMG, NCS, and EP studies, minimising interference and improving clinical confidence.
- **Intuitive Sierra® software** - fully customisable protocols, anatomy-based navigation, and automated analysis tools (AutoMUP, Firing Rate, Interference Pattern Analysis) reduce clicks and maximise efficiency.
- **1-12 channel amplifier** - scalable multi-channel acquisition allows simultaneous examination of multiple muscles or nerves, reducing examination time while maintaining high data quality.
- **Integrated neuromuscular ultrasound (NMUS)** - the Sierra NMUS1™ is the first fully integrated ultrasound solution in an electrodiagnostic platform, enabling real-time nerve and muscle visualisation, needle guidance, and injection tracking alongside EMG/NCS.
- **Flexible EP module** - comprehensive support for VEP, AEP, MEP and SSEP studies with advanced post-processing, customisable protocols, and automated reporting.
- **Durable, reliable hardware** - industrial-grade cables, machined aluminium dials, and precision connectors rated for 100,000+ connections are built for high-volume clinical use.



STANDARD SYSTEM CONFIGURATION

The Sierra Summit® base system includes:

- **Sierra Summit® Base Unit** - central control panel and hub for amplifiers, stimulators, and EP connections.
- **1-2 or 3-12 channel amplifier** with sophisticated filtering and noise reduction.
- **StimTroller™ Plus** - handheld electrical stimulator and remote control for EMG and NCS.
- **High-performance laptop or PC** with **Sierra® software**.
- Electrodes and cables for EMG, NCS, and EP studies.
- Full technical documentation and user manual.

FLEXIBLE CONFIGURATION AND ACCESSORIES

The base configuration of the Sierra Summit® system can be expanded with:

- **Sierra NMUS1™** - fully-integrated ultrasound for neuromuscular and musculoskeletal imaging and needle guidance.
- **EMG Cart** - engineered for integrated neurodiagnostics and neuromuscular imaging.
- **Fuzion Cart** - a lightweight cart for electrodiagnostics, designed for space-constrained environments and combination testing.
- **A soft travel case** for mobile practices and satellite clinics.
- **Full range of accessories**, including electrodes, needles (concentric, hypodermic, and monopolar), sterile ultrasound covers and ultrasound gel.



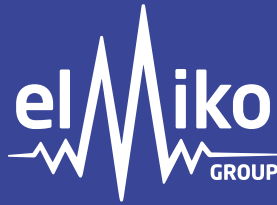
THE EMG SPECIALIST



The path to becoming an EMG specialist combines medical or technical education, specialised training, and clinical practice.

- **AKSON Education Centre** offers licensed training in neurodiagnostics and neuromuscular imaging, **conducted by recognised, world-class specialists**.
- Our programme is a key step in preparing for the **licensing examination** of the Polish Society of Clinical Neurophysiology.
- Upon passing the PTNK licensing examination, medical technicians **obtain the authorisation to assist during EMG** studies led by a certified physician.
- In turn, physicians **obtain the right to perform EMG** examinations independently.



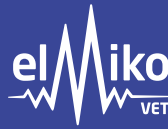


Create to Help.

The **ELMIKO GROUP** is a Polish brand with extensive, international experience, providing interdisciplinary support to clinicians and therapists in neurology and related fields. Together, we provide high-quality equipment and modern diagnostic methods, while simultaneously training specialists and focusing on patient well-being.



Our brands



ELMIKO is a manufacturer and distributor of cutting-edge medical apparatus and innovative solutions for neurology and neurotherapy, including systems for EEG, CFM, EEG Biofeedback, tES, TMS, and EMG.

The **AKSON Education Centre** organizes and conducts training in neurodiagnostics and neurotherapy for physicians, medical technicians, psychologists, educationalists, and therapists, including EEG, EMG, QEEG, EEG Biofeedback, tES, TMS, and others.

NEURODIAGNOSTYKA, a centre for neurological diagnostics and neurotherapy, provides services to individual patients. It offers services on-site, in neurological clinics and at the patient's home, as well as providing diagnostic services and equipment leasing in hospitals and clinics.

ELMIKO VET, a manufacturer of veterinary neurological equipment. It offers advanced solutions that support veterinary clinicians in the field of animal neurology and neurotherapy, including EEG diagnostics, and pain management and treatment.

ELMIKO BIOSIGNALS SP. Z O. O.



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