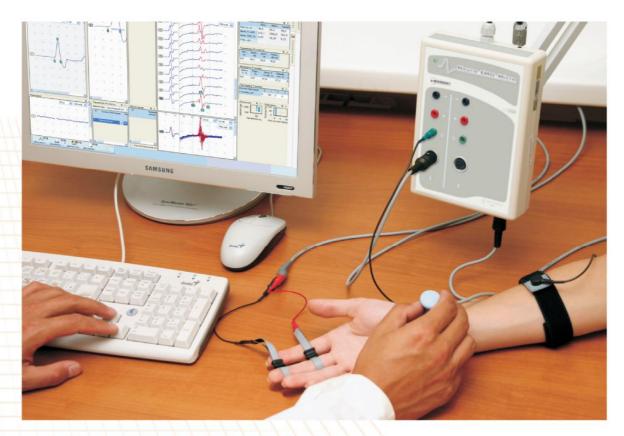
# **Neuro-EMG-Micro**

2-Channel Digital EMG System



#### With new software on .NET platform

Electroneuromyography

motor and sensory nerve conduction study (NCS), F-wave, H-reflex (also including paired stimulation), motor and sensory inching

Electromyography

spontaneous activity, interference curve, motor unit potentials (MUP)

Neuromuscular junction

repetitive stimulation, jitter (single fiber EMG)

Motor unit number estimation (MUNE)

Additional EMG techniques

blink reflex, sacral reflex, bulbocavernous reflex, T-reflex\*, galvanic skin responses

Somatosensory evoked potentials (SEP)

Transcranial magnetic stimulation (TMS)\*\*

Heart rate variability (HRV)\*\*\*



### **Neuro-MEP.NET Features**

#### Electroneuromyography:

- registration and analysis of M-wave characteristics and sensory action potential
- evaluation of motor/sensory conduction velocity
- F-wave, H-reflex (also including paired stimulation) parameters study
- magnetic stimulation of spinal roots and peripheral nerves with the further classic analysis of motor response\*\*
- blink reflex, sacral reflex, bulbocavernous reflex, T-reflex\*, galvanic skin responses
- motor and sensory inching

#### **Neuromuscular Junction Study:**

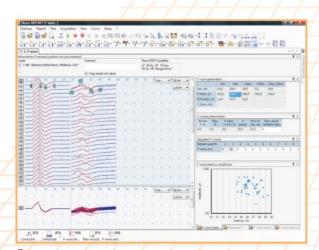
- analysis of M-wave decrement during repetitive stimulation of motor nerve
- tetanization and posttetanic phenomena study
- user-defined stimulation algorithm creation

#### **Motor Unit Potentials (MUP):**

- registration and analysis of spontaneous activity phenomena
- detection of MUP in automatic and manual modes
- automatic analysis of MUP parameters, determination of denervation-reinnervation process stage

#### Motor Unit Number Estimation (MUNE):

 registration and semiautomatic analysis with evaluation of motor unit quantity by incremental technique



F-wave

#### Spontaneous and Interference Electromyography:

- spontaneous activity
- turn-amplitude analysis of interference EMG
- amplitude-frequency analysis of interference EMG
- spectrum analysis of interference EMG
- rectified EMG
- EMG sound playback

#### Transcranial Magnetic Stimulation (TMS)\*

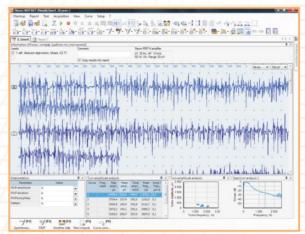
- determination of central motor conduction time of patients suffering from nervous system demyelination diseases, in particular, multiple sclerosis
- automatic calculation of root delay at F-wave and magnetic stimulation combined study

#### Somatosensory Evoked Potentials (SEP):

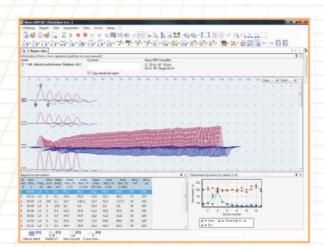
short- and long-latency SEP

#### Heart Rate Variability (HRV)\*\*\*:

- frequency-domain analysis of heart rate
- cardiovascular reflex tests performing



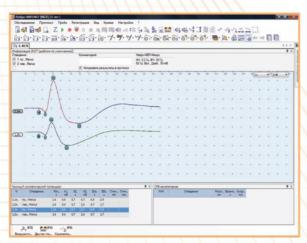
Interference EMG



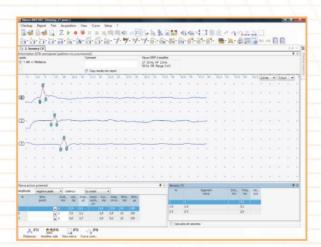
Repetitive stimulation



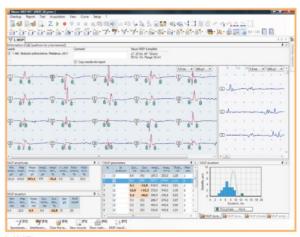
TMS



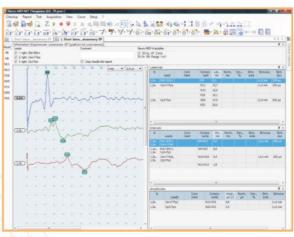
Galvanic skin responses



NCS. Sensory conduction velocity



MUP



SEP



HRV

- \* if tendon hammer is available
  \*\* if Neuro-MS magnetic stimulator is available
  \*\* if corresponding accessories and software are available

## **Base Delivery Set**

- Electronic unit
- Holder
- Set of EMG electrodes:
  - Surface electrode 2 pcs.
  - Bar electrode 2 pcs. (pediatric and adult)
  - Ring electrode with cable
  - Ground electrode with cable (pediatric) (250 mm)
  - Ground electrode with cable (adult) (400 mm)
  - Reusable concentric needle electrode
  - Adapter for needle electrode connection
  - Disposable surface electrode (set of 100 pcs.)
  - Adapter for disposable electrodes connection with Alligator clip (20 cm) – 2 pcs. (red and black)
- Cup electrode with cable 5 pcs.
- Pup-jack linker
- Stimulating bar electrode with replaceable steel and felt stimulation pads (adult)
- Measuring tape
- Electrode adhesive paste (100 g)
- Abrasive paste for skin preparation (160 g)
- Electrode gel (250 g)
- Software
- User and technical manuals
- Transportation bag



## **Extra Delivery Set**

- Footswitch
- Temperature sensor
- Tendon hammer
- Dedicated keyboard
- Neuro-EP software and equipment for AEP, VEP on flash and reversal pattern
- Poly-Spectrum-Rhythm software and equipment for heart rate rate variability (HRV) analysis
- Neuro-MS magnetic stimulator for diagnostic and therapeutic exposure on cerebral cortex motor zones, stimulation of spinal cord and peripheral nervous system



Dedicated keyboard

#### Dedicated Keyboard

New dedicated keyboard allows to realize maximally all the conveniences of operation on new software developed on .NET platform.

The dedicated keyboard is notable for compact size and ergonomy, due to them and also use of hotkeys for main functions, encoders and joystick it is possible to manipulate checkup parameters quickly and conveniently.

The keyboard can function via Bluetooth or USB interface. Reliable and stable functioning of the keyboard in this mode is provided by the built-in rechargeable battery with the possibility of its charging via USB port of the computer.



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