

Neuro Omega

- Integrated HaGuide Software - real time
- Subthalamic Nucleus navigation and stimulation recommendation
- Integrated research platform
- Closed loop and 3D stimulation possibilities
- User-friendly built-in EEG montages

The Neuro Omega is the latest technological breakthrough in MER. Innovative software and hardware implemented in the Neuro Omega make this all-encompassing system ideal for both clinical MER applications and for advanced clinical research applications. MER users gain total experimental control while benefiting from Alpha Omega's highest performance, quality and clinical efficacy

Key Qualities

- Expandable up to 122 channels
- Online data streaming to MATLAB and C++
- Closed loop stimulation control through data streaming or direct-to-processor scripting
- Unparalleled stimulation capabilities including conditional stimulation, programmable stimulation, and arbitrary wave definition
- Connectivity to DBS lead with integrated LFP acquisition and stimulation tools to support Lead Confirmation*
- Multi-source, multi-polar stimulation allows for 3D stimulation control
- Single cable exiting the sterile field for electrode positioning, recording and stimulation Online statistics including evoked potentials
- Unique dual screen display and customizable workspace
- Integrated analog and digital inputs and outputs

Neuro Omega Stimulation Foot Pedal

A hands-free solution for uninterrupted kinesthetic testing while simultaneously controlling the application of stimulation currents

- Enables delivering electrical stimulation from within the Sterile field
- A fully-integrated and simple USB plug-and-play interface seamlessly connects to Neuro Omega for independent control via software and handheld remote
- Waterproof as well as compliant with EMC and electrical safety standards



User Interface

- Trajectory view with pattern recognition for increased neural activity
- 10 channels built into the microdrive for recording and stimulation with micro and macro spike and LFP recordings
- Configurable with up to 122 channels integrated all in one system: Micro and Macro electrodes, LFP, EEG, EMG, ECoG
- One click impedance check for all channels and electrode types
- Flexible stimulation current ranges for microelectrode test stimulations, peripheral nerve stimulation and other stimulation research requirements
- Complete stimulation control on the basic stimulation parameters and the ability to create unique waveforms
- Save data for post-case analysis in MATLAB or other formats
- User-defined Events allow for easy marking and commenting onto a data file



Headbox Module

- Up to 7 additional modules, 16 channels per module with referential and differential recording for EEG, EMG, & ECoG
- Portable and compact
- Advanced multi-source stimulation capabilities for peripheral nerve and ECoG
- Medical grade, industry standard touch-proof connectors



[For more information](#)

Disclaimer: The information provided may pertain to products not available in your region. Always refer to approved indications for use. Content related to specific Alpha Omega products might not be intended for markets without authorization.

NeuroMic

The NeuroMic is a microphone fully-integrated with our data acquisition systems via a simple USB plug-and-play interface. This enables seamless voice recording fully time-synchronized with electrophysiological recordings, annotations of an event like patient feedback and side effects for both clinical and research applications. The data recorded using NeuroMic can also be easily imported into MATLAB for analysis along with electrophysiological recordings

- Record physician voice annotations
- Record patient voice during kinesthetic testing and speech-related research
- Start and stop recording with the click of a button
- USB Plug and play connectivity Voice recordings are timestamped and synchronized with electrophysiological recordings
- Recordings are saved in a simple WAV audio format

* Alpha Omega Sonus microphonic-free electrodes recommended for speech artifact suppression in electrophysiological recordings