visor2™LT

System components	visor2™ LT
Software	LT software
NDI Polaris camera	Vicra or Spectra
Mounting options	Tripod, wall mount or cart
High-performance PC with 24" LCD monitor	✓
Tracking tools	✓
Trigger box with remote control	✓
EMG/EEG amplifier	Supports up to 8 EMG channels
Pre-surgical EMG motor mapping	✓
Pre-surgical speech mapping	Optional
Stimulator trolley	Optional
Warranty	2 years (1 year on NDI camera and cart)
Support	Optional 1- or 2-year remote support
Training	Upon request
Accessories	Calibration board and TMS coil mounts are separately ordered and are available for all commercial TMS products. No calibration board required for MAG & More TMS coils.

Software features

	visor2™ LT
Individual MRI import	✓
Segmentation and head modeling	✓
Brain visualization	✓
Patient registration and digitization	✓
Coil management	✓ (dual-coil)
Targeting	✓
Offline analysis	✓
Induced electrical field calculation and display	✓
Export of image markers and stimulated sites	✓ (monochrome & colored)
Pre-surgical EMG motor mapping	✓
Pre-surgical speech mapping	✓ (as an extension module)
Integrated EEG recording functionality*	--

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visor2™ LT

Navigated TMS and pre-surgical evaluation solution

The clinical research package.

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visor2™ LT

Navigated TMS and pre-surgical evaluation solution

The visor2™LT solution matches specific needs of nTMS users in neuroscience and neurosurgery: a highly configurable system for combined EMG-TMS experiments, accurate real-time visualization of stimulated brain areas for reliable motor mapping in pre-surgical, functional evaluation and intuitive step-by-step workflows for straightforward operation.

visor2 LT integrates navigated TMS and EMG recordings with real-time 3D navigation and visualization of stimulated brain areas for use in neuroscience and clinical diagnosis. The LT solution comes with full neuronavigation software that includes segmentation and head modelling features for navigation with individual

MRIs and allows the simultaneous navigation of 2 TMS coils. **vi**sor2 LT supports single pulse and repetitive pulse TMS protocols and is compatible with different TMS stimulators and coils from various manufacturers. By using EMG together with focal TMS stimulation, **vi**sor2 LT offers an economical, non-invasive and accurate
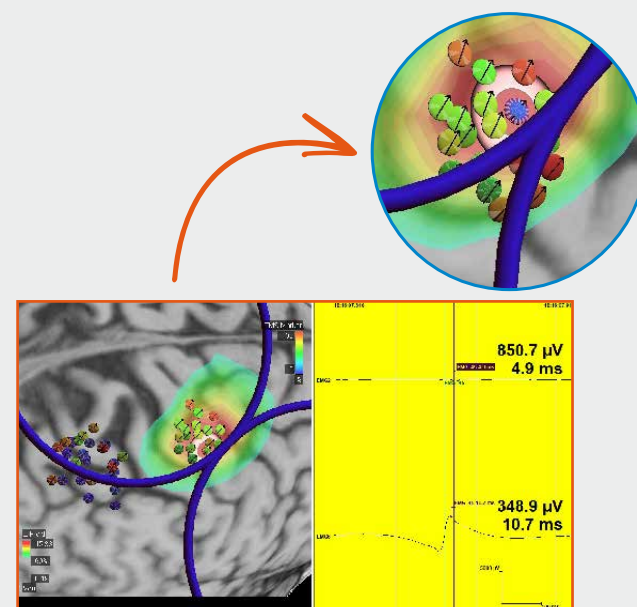
method of acquiring reliable motor-eloquent brain maps in pre-surgical evaluation with TMS. Pre-surgical speech mapping functionality can be easily integrated as an extension module. Please see the separate **vi**sor2 functional mapping brochure for more information.

Features and benefits

- Highly configurable TMS neuronavigation solution for neuroscience research and pre-surgical functional evaluation
- Integrated EMG-TMS recordings (2- or 6 channel EMG) with real time visualization of stimulated brain areas for accurate mapping in pre-surgical, functional evaluation
- Compatible with TMS stimulators and coils from various manufacturers
- Supports single-pulse and repetitive TMS protocols

- Dual-coil neuronavigation enabled
- Optional extension module for highly customizable, pre-surgical speech mapping supported by dedicated workflows
- Colored DICOM export of mapped functional hotspots for further review and processing in surgical navigation systems
- Intuitive step-by-step workflow enabling straightforward operation

Potential areas of application

TMS is a reliable and effective neurostimulation method that is safely used for both therapeutic and diagnostic purposes. The combination of single and multi-pulse TMS with peripheral EMG recordings provides a valuable tool to investigate the functionality of the human motor cortex in health and

disease. It helps in the assessment of pathological processes that underlie neurological and psychiatric disorders such as Alzheimer's disease, schizophrenia and depression. Integrated TMS-EMG also facilitates a close monitoring of affected brain areas like the motor cortex in conditions such

as stroke or tumours. **vi**sor2 LT adds accurate neurnavigation to combined TMS-EMG studies and accurate functional mapping of the cortex in pre-surgical evaluation. It supports a wide variety of TMS stimulators and TMS coil combinations specific to each area of application.

Research

- Neuroscience research (e.g. depression, pain, schizophrenia, cognitive psychology)
- Online EMG-TMS
- Sports medicine
- Brain mapping
- Visual Information processing
- eurolinguistic research
- Cognitive research (e.g. learning and memory)

Neurocare

- Motor Evoked Potentials (MEPs)
- Depression treatment
- Nerve conduction velocity
- Emergency medicine
- Stroke rehabilitation
- Investigation of motor and sensory functions
- Presurgical functional mapping of motor- and language-eloquent cortex
- Diagnostics

Pre-surgical EMG motor mapping

Precision matters – even more so for systems designed for pre-surgical evaluation where high accuracy is a must. **vi**sor2 LT integrates navigated TMS and EMG recording with real-time 3D visualization of stimulated cortical areas. Motor evoked responses (MEP) are processed online during the TMS stimulation and are projected color-coded according to their amplitude on the three-dimensional standard or patient-individual MRI. The result is a colored functional map that can be exported in colored DICOM format for use in surgical navigation systems.

850.7 µV
4.9 ms

348.9 µV
10.7 ms

EMG motor mapping in **vi**sor2

visor2 LT neuronavigation solution

Standard components:
- **vi**sor2 LT software set
- PC set with 24-inch widescreen monitor with mouse and keyboard
- NDI Polaris Vicra camera
- Tripod set for camera
- 2-channel EMG amplifier
- **vi**sor2 starter kit: e.g. passive sphere markers
- EMG starter kit
- Trigger box with remote control set
- Pointer tool and head tracker tool

Optional extras
- NDI Polaris: long-range Spectra camera instead of Vicra model
- Wallmount or cart instead of standard Tripod
- Coil mount set and calibration board
- **xen**sor™package for **vi**sor2 (3D electrode digitizer)
- 6-channel EMG instead of standard 2-channel EMG

visor2 LT solution
(Image may contain optional items. Actual model may vary.)