visor2™XT

System components	visor2™ XT
System components	VIS012 X1
Software	XT software
NDI Polaris camera	Vicra or Spectra
Mounting options	Tripod, wall mount or cart
High-performance PC with 24" LCD monitor	\checkmark
Tracking tools	\checkmark
Trigger box with remote control	\checkmark
EMG/EEG amplifier	64-channel EEG + up to 8-channel EMG
Pre-surgical EMG motor mapping	\checkmark
Pre-surgical speech mapping	Optional (available as extension module)
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

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

The visor2 system follows the compliancy requirements from the EU Medical Device Directive 92/43/EEC article 12 and includes visor2 software as CE class II a medical device. In Canada, visor2 is registered as medical device class II according to the Canadian MDR, under MDL number 88778. Special compliance applicable to extensions, selected modules for research only. Manufactured by eemagine Medical Imaging Solutions GmbH, Berlin, Germany, ISO 13485 certified. ANT Neuro and eemagine are part of the neuromotion group. The information in this document is not intended for users outside the EU and Canada.

EEG/TMS, speech mapping, dual coil navigation and further selected modules marked with * are for research only.

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Information in this document is subject to change.

www.ant-neuro.com/products/visor2



visor2[™]XT

combined EEG-TMS and pre-surgical evaluation solution



The multimodality package.

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visor2[™] XT

Combined EEG-TMS and pre-surgical evaluation solution

visor2 XT satisfies even the most demanding research and clinical requirements for combined EEG-TMS studies and pre-surgical evaluation.

visor2 XT is an advanced multimodality neuronavigation solution. It integrates all the features to satisfy even the most demanding research and clinical requirements for combined EEG-TMS recordings and functional mapping for pre-surgical evaluation. visor2 XT comes with a full set of functionality for real-time TMS neuronavigation,

dual-coil support and colored DICOM export of mapped functional hotspots for use in surgical navigation systems. In addition, it allows simultaneous EEG-TMS recordings with 64 EEG-channels and up to 8 EMG-channels. The visor2 software includes sophisticated EEG recording and analyzing features such as target definition based on EEG

source analysis useful in advanced research and clinical validation*. visor2 XT supports single pulse and repetitive TMS stimulations and is compatible with a variety of stimulators and stimulation coils combination for a wide range of research and clinical applications.

Features and benefits

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- Sophisticated neuronavigation solution with combined EEG-TMS and pre-surgical functional mapping to meet the most demanding requirements in brain research and clinical applications.
- High precision navigated TMS with real-time visualization of stimulated brain areas on individual patient MRI.
- Fully integrated EEG-TMS/EMG recordings (64-channel EEG and up to 8-channel EMG) for extended research potential.
- Compatible with different TMS stimulators and TMS coil

combinations for each specific application.

- Supports single pulse and repetitive pulse 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 safe

neurostimulation method that is widely used for both therapeutic and diagnostic purposes. The integration of EEG recordings with EMG-TMS provides a valuable non-invasive tool to investigate the functionality of the human motor cortex in health and disease states. It provides useful insights onto the mechanisms by which MEPs are

Research

- Neuroscience research (e.g. depression, pain,
- schizophrenia, stroke and cognitive psychology)
- Online EEG-TMS
- Online EMG-TMS
- Visual information processing
- Scientific validation
- Learning and memory
- Investigation of motor and sensory functions Noninvasive mapping of motor cortex and speech function

visor2 XT neuronavigation solution

Standard components:

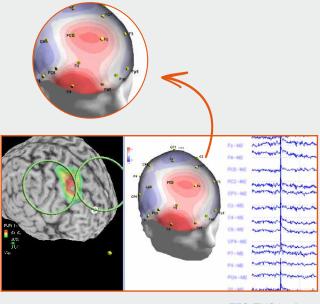
- visor2 XT software set
- PC set with 24-inch widescreen monitor with mouse and keyboard
- NDI Polaris Vicra camera
- Tripod set for camera
- Pointer tool and head tracker tool
- **asa**[™]pro trial licence
- **vi**sor2 starter kit: e.g. passive sphere markers
- 64-channel **wave**guard[™]cap
- 64-channel EEG and 6-channel EMG amplifier
- EEG starter kit

Optional extras:

- NDI Polaris: long-range Spectra camera instead of Vicra model
- Wallmount or cart instead of standard Tripod
- Coil mount and calibration board (TMS manufacturer and coil specific)
- **xen**sorTM package for **vi**sor2 (3D electrode digitizer)

Power up your research potential with navigated EEG-TMS

visor2 combines navigated TMS with high-density EEG recordings and source analysis features that give you unprecedented in-depth understanding of the human brain. **vi**sor2 software allows EEG/ERP recordings in configurable setups and the import and display of electrode positions in the patient MRI. It enables EEG data access and processing as well as annotations for further use in analysis. 3D voltage topology of a short-latency MEP can be used for TMS target definition. visor2 XT comes with a high-end 64-channel configurable EEG amplifier and -optionally- additional auxiliary channels. visor2 XT provides you great flexibility for your research.





modulated and helps achieve a better understanding of the pathological processes that underlie neurological and psychiatric disorders such as stroke, pain, schizophrenia, Alzheimer's disease and depression. Combined EEG-EMG-TMS may in addition facilitate the assessment of functional cortical impairments in conditions such as stoke or tumours. Using visor2 XT adds

accurate real-time neuronavigation that fully supports combined EEG-TMS studies. It is compatible with a wide range of TMS stimulator models and TMS coils for full and flexible support of the neuromodulation community. Pre-surgical speech mapping is available as an extension module. Ask us for the separate **vi**sor2 functional mapping brochure for further information.

Therapy

- Depression
- Stroke
- Tinnitus
- Pain

Diagnosis

- Motor Evoked Potentials (MEPs)
- Nerve conduction velocity
- Emergency medicine



visor2 XT solution optional items. Actual model may vary.)