

### visor2™ST

System components	visor2™ ST
Software	ST software
PowerMAG ANT 100 rTMS Stimulator	(Optional PowerMAG Clinical 30)
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	✓
EMG/EEG amplifier	64-channel EEG + up to 8 EMG (optional 2- or 6-channel EMG only)
Pre-surgical EMG motor mapping	$\checkmark$
Pre-surgical speech mapping	Optional
Reclining patient chair	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 mount are separately ordered and are available for all commercial TMS products. No calibration board required for MAG & More TMS coils.

#### Software features

	visor2™ ST
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*	$\checkmark$
Software interface to PowerMAG ANT 100 rTMS stimulator *	$\checkmark$

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 IIa 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 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.

**ANT Neuro b.v.**, Enschede, The Netherlands, tel: +31 53 43 65 175, fax: +31 53 43 03 795, internet: www.ant-neuro.com, e-mail: sales@ant-neuro.com

Information in this document is subject to change.

www.ant-neuro.com/products/visor2



# visor2™ST

Complete solution for navigated rTMS, functional mapping and EEG/EMG



A supreme solution for virtually every TMS application.







## visor2™ST

# Complete solution for navigated rTMS, functional mapping and EEG/EMG

visor2™ST is the complete rTMS lab for the most advanced research and treatments in neuromodulation.

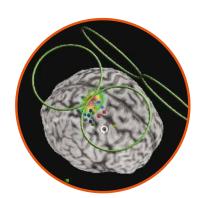
visor2 ST allows users to accurately evaluate functional organization of the human cortex using non-invasive, navigated transcranial magnetic stimulation (TMS). This innovative solution comes with an integrated high-frequency rTMS stimulator, accurate real-time 3D neuronavigation, simultaneous EEG-TMS recording and intuitive step-by-step workflows for motor and optional speech mapping module. The ST solution supports a broad range of TMS

stimulation coils and can be adapted to specific fields of applications. **vi**sor2 ST navigated rTMS will guide you through each step of a TMS session, making your work faster, safer and more accurate than ever before.

#### Features and benefits

**(** 

- Complete rTMS lab for the most advanced studies in brain neuromodulation
- High precision navigated TMS with real-time visuallization of stimulated brain areas on standard MRI or individual patient MRI imports
- Enables simultaneous tracking of up to two TMS coils
- Fully integrated high-frequency PowerMAG ANT 100 Hz rTMS stimulator
- Compatible with a broad range of TMS coils for each specific application
- Supports a wide range of TMS protocols such as navigated single-pulse, rTMS, ppTMS, train and ramp
- Seamless EEG-EMG-TMS multimodality integration
- Intuitive step-by-step workflow for the mapping of speech and motor functions
- Colored DICOM export of mapped functional hotspots for further use in surgical navigation systems



Reliable TMS-3D neuronavigation with dual coil support

#### A supreme solution for virtually every TMS application.

The **vi**sor2 ST solution comes with an integrated PowerMAG ANT 100 TMS stimulator. This high power 100 Hz rTMS stimulator supports highly-precise single pulse and repetitive pulse TMS protocols in a variety of clinical and research applications. rTMS protocols are fully customizeable

through an intuitive software on **vi**sor2 ST. Stimulation parameters such as individual threshold value, pulse intensity, frequency and sequence are displayed and can easily be edited. The user can additionally customize pulse patterns including ramps, trains and theta burst. Pre-surgical

speech mapping functionality can be integrated with an extension module. For additional information about **vi**sor2 ST speech and motor mapping functionalities and the PowerMAG ANT 100 TMS stimulator, please see dedicated product brochures for further information.

## Potential areas of application

#### 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

#### Diagnosis

- Determination of central and peripheral motor latency times
- Determination of Motor Evoked Potentials (MEPs)
- Nerve conduction velocity
- Noninvasive mapping of motor cortex and speech function
- Emergency medicine

#### Therapy

- Depression
- Stroke
- Tinnitus
- Pain

#### visor2 ST stimulators

PowerMAG ANT 100 (standard)

Max. stimulation frequency

100 Hz

30 Hz

Full- and half wave

✓

Paired pulse TMS - ppTMS (long ppTMS intervals ≥ 10ms)

Theta Burst Stimulation

✓

rTMS, train and ramp protocols

EEG

✓

Software control of stimulation parameters

PowerMAG ANT 100 (standard)

PowerMAG clinical 30 (optional)

To Hz

30 Hz

✓

✓

Full- and half wave

✓

--
Software stimulation frequency

100 Hz

30 Hz

✓

✓

--
Software stimulation frequency

100 Hz

30 Hz

✓

✓

✓

--
Software control of stimulation parameters

## visor2 ST navigated rTMS solution

#### Standard components:

- visor2 software set
- PC set with 24-inch widescreen monitor
- NDI Polaris Vicra camera
- Tripod set for camera
- PowerMAG ANT 100 Hz TMS stimulator
- Trigger box with remote control set
- 64-channel EEG and 6-channel EMG amplifier
- 64-channel **wave**guard™cap
- EEG starter kit
- Pointer tool and head tracker tool
- asa<sup>™</sup>pro trial licence

#### Optional extras

- Pre-surgical speech mapping module
- TMS stimulation coil
- Reclining patient chair
- xensor™package for visor2 (3D electrode digitizer)
- NDI Polaris: long-range Spectra camera instead of Vicra model



visor2 ST solution (Image may contain optional items. Actual model may var