

# powermag ANT 100

Ultimate rTMS tool for high end applications



**NEW**

High power  
100 Hz rTMS  
stimulator

Unleash the real power of TMS.

# powermag ANT 100

## Ultimate rTMS tool for high end applications

The PowerMAG ANT 100 stimulator is designed for the specific needs of high-end TMS applications. Powerful high-frequency TMS as well as high precise single pulse and repetitive pulse protocols are combined in one

single device. The system is equipped with a novel interfacing technology that opens up new applications possibilities by combining TMS stimulations with other methods, such as EEG, EMG and MRI. The simple and intuitive design

ensures a user friendly environment when using the stimulator. PowerMAG ANT 100 comes standard with the visor2TMST navigated rTMS solution. It is also available as a stand-alone device.

### New features and benefits

- High power high frequency rTMS stimulator up to 100 Hz.
- Provides highly-precise single pulse and paired pulse protocols.
- Enables Theta Burst Stimulation (TBS) with up to 80% intensity.
- Support a wide range of TMS protocols including single pulse, rTMS, ppTMS, train and ramp.
- Enables combined TMS-EEG experiments with clean signals after 5ms, free of noise or artifacts.
- Fully customizable pulse parameters through an intuitive control panel.
- Long durability allowing for up to 2,000,000 discharges at 100% intensity.
- Can be used with a variety of stimulation coils for each specific application.

### PowerMAG ANT 100 technical specifications

<b>Max. Frequency</b>	100 Hz (mono- and biphasic)
<b>Max. intensity up to 30 Hz</b>	100% (mono- and biphasic)
<b>Max. intensity at 50 Hz</b> (necessary for Theta Burst Stimulation)	80% (mono- and biphasic)
<b>Max. intensity at 100 Hz</b>	70% (mono- and biphasic)
<b>Dimensions (w x h x d); weight</b>	490 x 260 x 600 mm ; 38 kg
<b>Pulse duration</b>	160 $\mu$
<b>Number of discharges at 100% intensity</b>	2,000,000
<b>Hardware classification to MDD 93/42/EEC</b>	CE Class IIa

## Push the boundaries in TMS applications

PowerMAG ANT 100 is included in the **visor2™ST** navigated rTMS solution. The software integrated stimulator allows users to directly control stimulation parameters

through the user interface. By supporting a broad range of stimulation coils, the PowerMAG ANT 100 can be adapted to specific fields of application in neuroscience

research and therapy. For example, it can be used with a passive cooled coil, allowing longer TMS sessions through less heating.

## Potential areas of application

- High power and high frequency protocols.
- Neuroscience research (e.g. depression, pain, schizophrenia, stroke, cognitive psychology).
- Therapeutical protocols.
- Theta Burst Stimulation.
- Combined EEG-TMS experiments.
- Online TMS-MRI.
- Clinical and scientific validation.
- Pre-surgical functional mapping.
- Visual information processing.
- Learning and memory.
- Sports medicine.



PowerMAG ANT 100 solution (including a stimulator, TMS coil and external trigger). The trolley is optionally available.



## Additionally available in the PowerMAG range

**PowerMAG combines high-performance stimulators, state-of-the-art coils and various advanced equipment that enable versatile usage of the PowerMAG systems.**



### PowerMAG clinical 30

The PowerMAG clinical 30 is a classic stimulator for a variety of clinical applications. It features highly precise, single pulses for functional diagnostics as well as therapeutic protocols for continuous muscle stimulation. It delivers stable maximum pulse intensity (100% output) in the entire frequency range (0 to 30Hz), which is essential in achieving effective peripheral stimulation (e.g. continuous muscle relaxing in stroke, incontinence, etc.). PowerMAG clinical 30 is optional in the **visor2** ST navigated rTMS solution. It is also available as a stand-alone device.



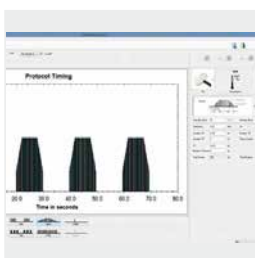
### Application-oriented coils

PowerMAG stimulation TMS coils have been developed continuously together with our frequent users resulting in the highest quality, accuracy and efficiency. By using application-oriented coil geometries and electromagnetic properties, the PowerMAG system allows for maximum usability with the best outcome:

**Efficiency:** a variety of stimulation coils for specific applications.

Less coil heating is achieved with the passive cooling option (Double coil PMD70-pCool).

**Comfort:** lightweight coils with considerable stimulation noise reduction.



### Fully customizable rTMS protocols

PowerMAG stimulators support standard and custom TMS protocols for maximum flexibility. TMS session parameters such as individual threshold value, pulse intensity, frequency and sequences are displayed and easily set through MAG & More's PowerMAG Control software. Users can completely edit pulse patterns including ramps, trains and theta burst.

## Stimulator features

	PowerMAG ANT 100	PowerMAG clinical 30
<b>Full- and half wave</b>	✓	✓
<b>Paired pulse TMS - ppTMS</b>	✓	--
<b>Theta Burst Stimulation</b>	✓	--
<b>Single pulse, rTMS, train and ramp protocols</b>	✓	✓
<b>EEG</b>	✓	--
<b>EMG</b>	✓	✓
<b>Ready for neuronavigation</b>	✓	✓

CE marked as a medical device in the EU, according to MDD 93/42/EEC, class IIa. Manufactured by MAG & More GmbH, München, Germany, ISO 13485 certified. Distributed by ANT Neuro and eemagine, part of the neuromotion group. Outside the EU, the system is intended for research and educational use only. In the United States, limited by federal law to investigational use only.

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Information in this document is subject to change.

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