Advance your **neuroscience research** with **multimodal HD EEG**

Whole head sensor nets and complete solutions for your brain research*

magstim® EGI

Optimized tools for studying the brain

Comparable to the most advanced neuroimaging technology in the world, HD EEG is more accessible, easier-to-use, and cost-effective.[1]

The exclusive Geodesic Sensor Nets provide whole head and evenly distributed coverage

- Capture activity from the entire brain, including the anterior, basal, and medial regions
- Fast and easy application, ideal even with challenging populations
- Sizes for infants, pediatrics, and adults available
- Nets compatible for fMRI, TMS, MEG, TES, and extended recordings available
- Options for saline and gel-applied electrodes available

Choose the channel count options best suited for your research:


32 channels


64 channels


128 channels

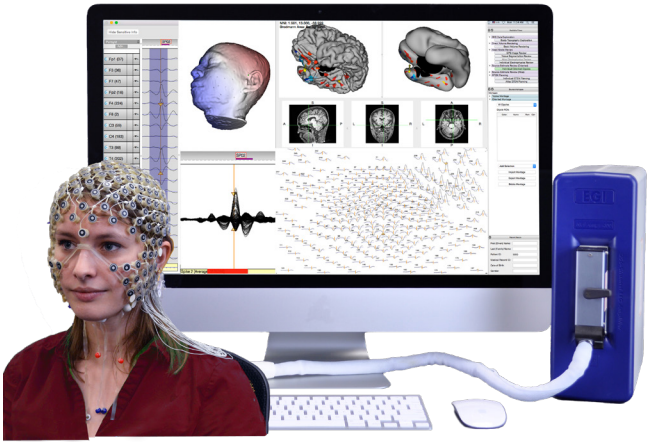

256 channels

Net Amps HD EEG amplifier

- Combines high spatial resolution with high temporal resolution at customized sampling rates
- Supports up to 32 extra physiological channels
- Both cart-based and semi-portable configurations

Integrated Net Station software

- Visualizes HD EEG data intuitively
- Builds on the 10-20 logic and furthers the experience to the full sensor array
- Calculates cortical source estimations with the GeoSource upgrade


Geodesic EEG System 400 Research*

Take your research to the next level

Researchers worldwide have published thousands of peer-reviewed articles leveraging the EGI multimodal ecosystem.

Multimodal integration

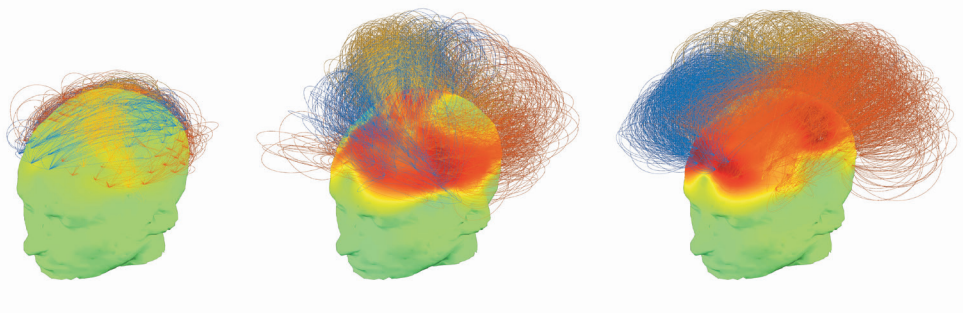
Leverage extensive options for presenting stimuli, co-registration, and synchronous recordings; including brain-to-brain interaction and neuromodulation.

Interoperability

Easily increase your scope by incorporating additional functionalities such as eye-trackers with network timing protocols and robust third-party software.

Example of Interoperability: open source software

Seamlessly switch between Net Station and multiple open source environments including EEGLAB, Fieldtrip, MNE, Python and back again. SDK compatibility with LSL enables interaction with live data streams.



In a recent example of a customer's innovation, they leveraged the open source platforms to develop a new way of analyzing high-density EEG by showing the striking difference in the alpha connectivity networks of two vegetative patients (left and middle). Despite being behaviorally unresponsive, the patient in the middle had a network similar to that of a healthy adult (right) and also showed evidence of hidden awareness.[2]

Expandable and multimodal HD EEG platform to grow alongside your research

Product packages

Product name	Details
Geodesic EEG System 400 Research*	• Net Amps 400 amplifier in 32 to 256 channels • Desktop or laptop configuration • Net Station Software and License • 1 Year System Warranty
Geodesic Sensor Net	• Sponge-based HydroCel Nets for rapid application • Gel nets for long term recordings • Low profile nets for concurrent TMS or MEG • Available in sizes from neonate to adult

Full integration

Product name	Details
GeoSource 3 software	Electrical source imaging software with atlas models, or individualized head models
Geodesic Transcranial Electrical Neuromodulation (GTEN) upgrade	One system for simultaneous HD tES and EEG
MR-Conditional upgrade	Includes artifact removal algorithms for simultaneous EEG-fMRI
E-Prime packages	Seamless integration with E-Prime, available in laptop or desktop configurations with ready-built paradigms

***Geodesic EEG System 400 Research is not intended for use in diagnosis or treatment of any disease or condition. It is a scientific research instrument designed for performing measurements and acquiring data for neurophysiological research.**

1. Ashwati Krishnan, Ritesh Kumar, Arnelle Etienne, Amanda Robinson,Shawn K. Kelly, Marlene Behrmann, Michael J. Tarr, Pulkit Grover. 2018. Challenges and Opportunities in Instrumentation and Use of High-Density EEG for Underserved Regions. Innovations and Interdisciplinary Solutions for Underserved Areas, pp.72-82. DOI: 10.1007/978-3-319-98878-8_7
2. Chennu, S., Annen, J., Wannez, S., Thibaut, A., Chatelle, C., Cassol, H., Martens, G., Schnakers, C., Gosseries, O., Menon, D. & Laureys, S. 2017. Brain networks predict metabolism, diagnosis and prognosis at the bedside in disorders of consciousness. Brain, 140(8), 2120-2132

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