

# Enobio® EEG systems

## Key Features

### Precise EEG

With high dynamic resolution & sampling rate, Enobio® is one of the most precise systems in its class.

### Easy set-up

In just a few minutes, prepare your EEG recording of up to 32 channels.

### Mobile and wireless

Record up to 20 hours on an SD card, open for integrations with other physiologic sensors.

## Family products comparison

	Enobio 32	Enobio 20	Enobio 8
Channels	✓✓✓	✓✓	✓
<b>Practical for Applications*</b>			
EEG monitoring in clinical applications	✓✓✓	✓✓	✓✓
Brain development research	✓✓✓	✓✓	✓
Mobile brain imaging	✓✓	✓✓	✓✓✓
Brain computer interfaces	✓✓	✓✓	✓✓✓
Neurofeedback applications	✓✓✓	✓✓✓	✓✓
Application development with SDK	✓✓✓	✓✓✓	✓✓✓
Consumer neuroscience research	✓✓✓	✓✓✓	✓✓

### Service

Warranty	2 years standard / 5 years GOLD
EEG Insights Consultancy	Consulting service of Starlab, our exclusive partner leading in applied neuroscience.
Customer Service	Free lifetime customer support + one-on-one expert assistance.

\* Based on your research goal or application the final selection may be different

### Real-time EEG analysis

Time frequency analysis with scalp and cortical display during EEG acquisition.

### Proprietary dry & wet electrodes

Enobio® offers handy gel, and dry electrode solutions, ready for your application.

## Technical Specifications

DEVICE	Enobio 32	Enobio 20	Enobio 8
Number of channels	32 Channels	20 Channels	8 Channels
Bandwidth	0 to 125 Hz (DC coupled)		
Sampling rate	500 SPS		
Dynamic range	24 bits – 0,05 microvolt (µV)		
Measurement noise	< 1 µV RMS		
Input impedance	> 1 GΩ		
3 axes accelerometer	Yes (100 S/s)		
Operating time — WiFi communication	5.5 hours	5.5 hours	6.5 hours
Operating time — MicroSD recording	16.5 hours	17.0 hours	20.0 hours
Operating time — USB communication	19.0 hours	19.0 hours	24.0 hours

### Available electrodes

Dry (Drytrode)	✓	✓	✓
Wet (NG Geltrode with gel)	✓	✓	✓

## Multiple electrodes designed to match your Set-up requirements

### NG Geltrode with gel

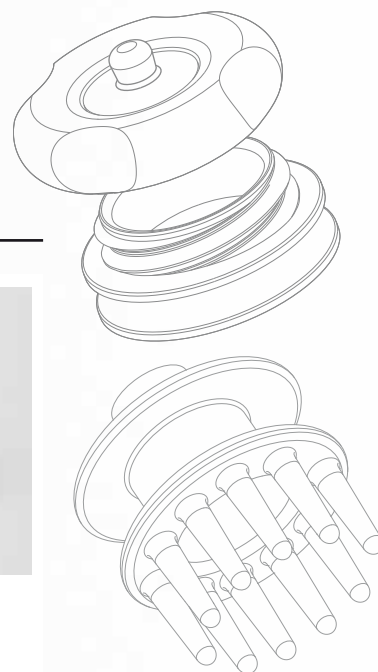


Screwable electrode applicable in wet and semi-dry setups.

### Drytrode



Dry electrode for robust quick and clean setups.



## Recommended publications

Troller-Renfree, Sonya V., et al., *The impact of a poverty reduction intervention on infant brain activity.* Proceedings of the National Academy of Sciences. (2022)

Vecchiato, Giovanni, et al., *EEG-EMG coupling as a hybrid method for steering detection in car driving settings.* Cognitive Neurodynamics. (2022)

Pino, Angie, et al., *Brain-Computer Interface for Controlling Lower-Limb Exoskeletons.* Interfacing Humans and Robots for Gait Assistance and Rehabilitation. (2021)

Maidan, Inbal, et al., *Changes in event-related potentials during dual task walking in aging and Parkinson's disease.* Clinical Neurophysiology. (2019)

Villafaina, Santos, et al., *Electroencephalographic response of chess players in decision-making processes under time pressure.* Physiology & Behavior. (2019)

Dehais, Frédéric, et al., *Monitoring pilot's mental workload using ERPs and spectral power with a six-dry-electrode EEG System in real flight conditions.* Sensors. (2019)

Babiker, Areej, et al., *EEG in classroom: EMD features to detect situational interest of students during learning.* Multimedia Tools and Applications. (2019)



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enobio<sup>NE®</sup>

Enobio® EEG systems.  
Wireless medical grade systems for high precision EEG monitoring

NE<sup>®</sup>

CE Medical Device



NE<sup>®</sup>  
neuroelectrics®

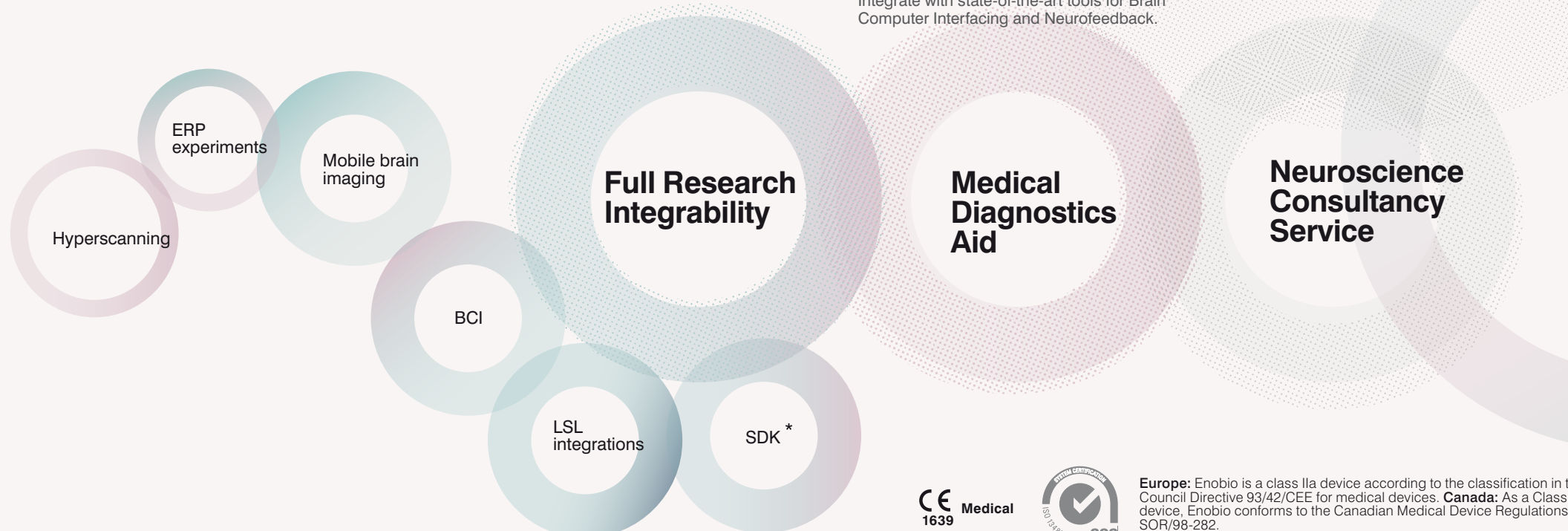
Wireless medical grade systems for high precision EEG monitoring

Medical diagnostics  
User affective state  
Brain Computer Interfaces  
Neuroscience research



# Enobio® is our wireless and powerful, easy-to-use EEG system that is ready for basic and advanced research.

Welcome to the next generation of precise recording EEG devices with 8, 20 and 32 channels, with an intuitive user interface for real-time visualization of high resolution EEG data. Enobio® is CE medically certified in Europe.



## Fully Integrative Platform & Service for Brain Research.

### ERP

Integrate stimuli software and EEG analytics libraries for effective Event Related Potentials (ERP) experiments.

### SDK

Use Enobio APIs to integrate the raw EEG signals into your investigational app.

### BCI

Integrate with state-of-the-art tools for Brain Computer Interfacing and Neurofeedback.

### Mobile brain imaging

Record outside of the lab for sports performance and consumer neuroscience research.

### Hyperscanning

Study multiple subjects at a time with precise synchronization.

Full Research Integrability

Medical Diagnostics Aid

Neuroscience Consultancy Service



**Europe:** Enobio is a class IIa device according to the classification in the Council Directive 93/42/CEE for medical devices. **Canada:** As a Class II device, Enobio conforms to the Canadian Medical Device Regulations SOR/98-282.

\* The SDK can only be used for EEG-based investigational applications.



## Enobio® EEG systems come with powerful software.

NIC2 is a powerful software interface that includes real-time EEG monitoring and visualizations; scalp and cortical mapping of brain activity; spectrum, spectrogram, band power plots, accelerometer data; external triggering options; and sample-precision live data streaming using LSL or TCP/IP.

