## **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

**Customer Service** 

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.

## 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.

#### Family products comparison

	Enobio 32	Enobio 20	Enobio 8	
Channels	<b>~~~</b>	<b>**</b>	~	
Practical for Applications*				
EEG monitoring in clinical applications	<b>///</b>	<b>~ ~</b>	<b>~</b>	
Brain development research	<b>~~~</b>	<b>~ ~</b>	<b>~</b>	
Mobile brain imaging	<b>~ ~</b>	<b>~ ~</b>	<b>///</b>	
Brain computer interfaces	~ ~	<b>~ ~</b>	<b>///</b>	
Neurofeedback applications	<b>~~~</b>	<b>**</b>	<b>~ ~</b>	
Application development with SDK	<b>///</b>	~~~	<b>///</b>	
Consumer neuroscience research	<b>~~~</b>	<b>***</b>	~ ~	
Service				
Warranty	2 years standard / 5 years GOLD			
EEG Insights Consultancy	Consulting service of Starlab, our exclusive partner leading in applied neuroscience.			

Free lifetime customer support

+ one-on-one expert assistance.

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)	~	<b>~</b>	<b>✓</b>		
Wet (NG Geltrode with gel)	~	~	~		

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

NG Geltrode with gel

Drytrode



Screwable electrode applicable in wet and semi-dry setups.



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)

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

EEG monitoring





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Wireless medical grade systems for high precision EEG monitoring

Medical diagnostics
User affective state
Brain Computer Interfaces
Neuroscience research

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

# 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.

Mobile brain

imaging

experiments

Hyperscanning

## 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

arch Medical Diagnostics

Neuroscience Consultancy Service

LSL integrations SDK



**Europe:** Enobio is a class IIa device according to the classification Council Directive 93/42/CEE for medical devices. **Canada:** As a C device, Enobio conforms to the Canadian Medical Device Regulat 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.



