# Enobio<sup>®</sup> EEG systems

#### **Key Features**

#### Precise EEG

With high dynamic resolution & sampling rate, Enobio<sup>®</sup> 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.

#### **Real-time EEG analysis**

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

#### Proprietary dry & wet electrodes

Enobio® offers handy gel, solidgel 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)	~	~	~
Semi-dry (NG Geltrode with Solidgel)	~	~	~
Wet (NG Geltrode with gel)	~	~	~

#### Family products comparison

	Enobio 32	Enobio 20	Enobio 8	
Channels	~~~	~~	<	
Practical for Applications*				
EEG monitoring in clinical applications	~~~	<ul> <li>✓</li> </ul>	~~	
Brain development research	~~~	~ ~	<ul> <li>✓</li> </ul>	
Mobile brain imaging	~~	~ <b>~</b>	~ ~ ~ ~	
Brain computer interfaces	~~	~~	~ ~ ~ ~	
Neurofeedback applications	~~~	~~~	~~	
Application development with SDK	<b>~~</b>	~~~	~ ~ ~ ~	
Consumer neuroscience research	~~~	~~~	~~	
Service				
Warranty	2 years standard / 5 years GOLD			

EEG Insights Consultancy

**Customer Service** 

Consulting service of Starlab, our exclusive partner leading in applied neuroscience. Free lifetime customer support + one-on-one expert assistance.

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

NG Geltrode with gel

NG Geltrode with Solidgel

Drytrode

Dry electrode for robust

quick and clean setups.



Screwable electrode applicable in wet and semi-dry setups.



Clean semi-dry EEG disposable compatible with NG Geltrode.



(2019)

Rehabilitation (2019)



#### Recommended publications

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

Bertomeu-Motos, Arturo, et al., User activity recognition system to improve the performan ce of environmental control interfaces: a pilot study with patients. Journal of Neuroengineering and

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 Controlled Trial. Journal of real flight conditions. Sensors Clinical Medicine (2019) (2019)

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

Villafaina, Santos, et al., Effects of Exergames on Brain Dynamics in Women with Fibromyalgia: A Randomized

# NE neuroelectrics®

FDA Cleared CE Medical Device



US Office in BOSTON. 210 Broadway, Suite 201. Cambridge, MA 02139, USA. EUROPE Office in BARCELONA. Av. Tibidabo 47 bis. 08035, Barcelona. Spain. Tel.+34 93 254 03 66 info@neuroelectrics.com



NE neuroelectrics®

Wireless medical grade systems for high precision EEG monitoring

Medical diagnostics User affective state Brain Computer Interfaces Neuroscience research

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

## Enobio<sup>®</sup> 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<sup>®</sup> is CE medically certified in Europe and FDA-cleared in the US.

## 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

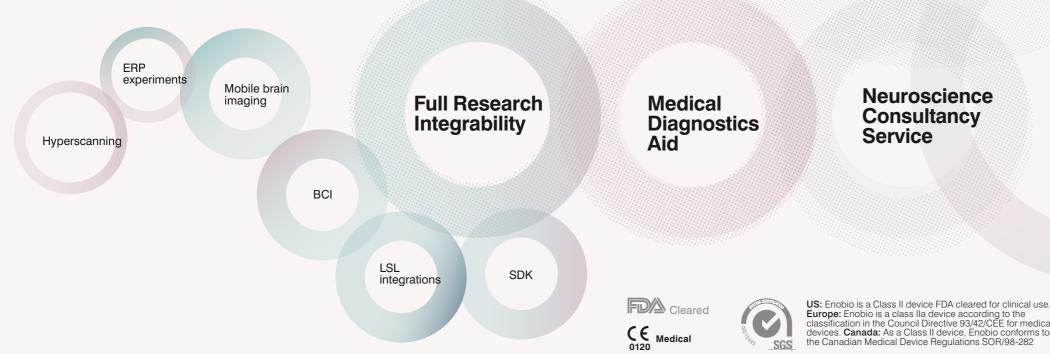
Integrate with state-of-the-art tools for Brain Computer Interfacing and Neurofeedback.

# 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.



# Enobio<sup>®</sup> 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.

