

Enobio[®] technical specifications

HARDWARE	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 (μ V)		
Measurement noise	< 1 μ V RMS		
Input impedance	>1 G Ω		
CMRR	-115 dB		
Communication	Wi-Fi IEEE 802.11 g or USB		
3 axes accelerometer	Yes (100 S/s)		
MicroSD card for offline recording	✓	✓	✓
Rechargeable system using Li-Ion battery	✓	✓	✓
Device dimensions	89.1 mm x 61.1 mm x 23.8 mm		
Device weight	96 g	86 g	78 g
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
Allows for simultaneous stimulation (tDCS and TMS compatible)	✓	✓	✓

SOFTWARE

File output	Proprietary NEDF or EDF+ & ASCII file formats		
Real-time EEG monitoring	✓	✓	✓
Scalp and cortical mapping of brain activity	✓	✓	—
Spectrum, spectrogram and band power plots	✓	✓	✓
Raw data streaming output	Lab Streaming Layer (LSL) outlets or TCP/IP port		
EEG markers sources	Lab Streaming Layer (LSL) inlets, TCP/IP, keyboard, TTL triggers		
Timestamp synchronization for precise hyperscanning	✓	✓	✓
Compatible with Windows 7/8/10/11 and macOS (\geq High Sierra)	✓	✓	✓
3rd party EEG software compatibility	OpenVibe, BCI2000, NeuroGuide, E-Prime (via Lab Streaming Layer)		
Offline EEG analysis	MatLab (EEGLAB Plugin), Python (NEPY library)		
Investigational applications via Software Development Kit	✓	✓	✓
Networked system control with MatNIC toolbox	✓	✓	✓

HEADSET

Available headcaps	6 sizes: 42/46/49/54/57/60cm		
EEG custom montages	Headcaps available with 39 or 64 of 10-10 EEG system positions		
Set-up time using gel	20-25 minutes	15-20 minutes	8-12 minutes
Set-up time using dry electrodes	4 minutes	3 minutes	1-2 minutes

Enobio[®] product content

Enobio 32	Enobio 20	Enobio 8
1 x Enobio 32 NECBOX	1 x Enobio 20 NECBOX	1 x Enobio 8 NECBOX
1 x Neoprene headcap size M	1 x Neoprene headcap size M	1 x Neoprene headcap size M
4 x NG Geltrode (bag of 8)	3 x NG Geltrode (bag of 8)	1 x NG Geltrode (bag of 8)
1 x Earclip	1 x Earclip	1 x Earclip
1 x Kendall™ H124SG Electrodes (bag of 50)	1 x Kendall™ H124SG Electrodes (bag of 50)	1 x Kendall™ H124SG Electrodes (bag of 50)
1 x Set of cables Enobio 32 1 x 10 Electrode cable	1 x Set of cables Enobio 20 1 x 10 Electrode cable	1 x 10 Electrode cable
1 x Signagel® Electrode Gel (250g)	1 x Signagel® Electrode Gel (250g)	1 x Signagel® Electrode Gel (250g)
1 x Curved syringe	1 x Curved syringe	1 x Curved syringe
1 x USB Stick with manuals & Software	1 x USB Stick with manuals & Software	1 x USB Stick with manuals & Software
1 x USB wifi dongle	1 x USB wifi dongle	1 x USB wifi dongle
1 x USB Isolator & Extension cable	1 x USB Isolator & Extension cable	1 x USB Isolator & Extension cable
1 x Wifi devices power adapter	1 x Wifi devices power adapter	1 x Wifi devices power adapter