

NEW GENERATION

Versatile Plus 16/32ch EEG

Next generation high-performance EEG. Just add water.
Research-grade signal, from lab to the real world.

64-channel | coming in 2027



Versatile Plus 16/32ch EEG

Next generation of Bitbrain's water-based EEG.

Wearable and flexible water-based EEG for advanced research, from controlled laboratory recordings to wireless real-world studies.



16/32 Water-based EEG Channels

Up to 2048 SPS at 24 bits

USB or Bluetooth Transmission

Up to 10 h Battery Life

6-axis IMU, ExG and Optical Trigger

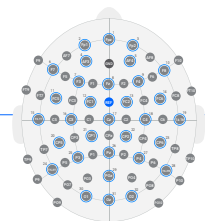
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Water only preparation
Plain water in absorbent sponges, for clean, repeatable setup with no gel or clean up.

Wired + wireless flexibility
Wired or Bluetooth transmission for controlled lab work and out-of-lab recordings.

High-performance acquisition
Active shielding, configurable high-resolution sampling, and real-time impedance check for clean, reliable signal.

Multimodal-ready ecosystem
Record extra signals like ExG and triggers directly on the amplifier and sync other Bitbrain devices through our SennsLite software.



SENSOR LAYOUT

Flexible electrode placement within the international 10-20 and 10-10 system.

Use Cases



Hyperscanning

Synchronize EEG across multiple participants with our SennsLite Software to study social interaction, collaboration, and group dynamics.



Naturalistic and Applied Research

Take **EEG out of the lab** for ecological studies, fieldwork, and applied neuroscience, without giving up signal quality.



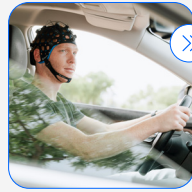
VR and Immersive Research

Flexible sensor placement fits EEG around VR headsets, for studying cognition, attention, and behavior in immersive conditions.

Technical Overview



» **Amplifier, caps, and accessories.**
everything you need to record, delivered in a portable, ready-to-use kit.



» **Records anywhere.**
Wireless recording with a full working day of battery and 64 GB onboard storage.



» **Research ecosystem.**
Sync with other Bitbrain devices through SennsLite software, and export to CSV and EDF for Python, MATLAB, and other analysis tools.

Technical Specifications

Research-grade EEG, built on active shielding and optimized DRL. Record and synchronize directly in SennsLite, our data acquisition software, included at no additional cost. Your data is stored in open formats, giving you full access and flexibility.

HARDWARE

| SENSORS AND HEADSET | 16ch | 32ch |
|---------------------|---|---|
| EEG channels | 16x EEG, REF, GND | 32 x EEG + REF + GND; configurable 16 x EEG |
| Type of sensors | Water-based sensors, active shielding and optimized DRL | |
| Head perimeter | 420-630 mm | |

| SAMPLING RATE/RESOLUTION | |
|--------------------------|---------------------------|
| Bluetooth | Up to 256 SPS at 24 bits |
| USB | Up to 1024 SPS at 24 bits |
| SD Card | Up to 2048 SPS at 24 bits |

| WIRELESS AMPLIFIER | |
|---------------------------|--|
| Bandwidth | DC-100 Hz (3rd-order LPF) |
| Real-time impedance check | Yes |
| Integrated sensors | Integrated 6-axis IMU: accelerometer and gyroscope |
| Other inputs | 2 x bipolar ExG; 1 x optical trigger / digital I/O |
| Data backup | CSV, EDF; internal 64 GB SD card |

| DATA STREAMING AND STORAGE | |
|-----------------------------|--|
| Data transmission and range | USB or Bluetooth BR/EDR; up to 9 m line of sight |
| Data files | CSV, EDF; internal 64 GB SD card |

| POWER | 16ch | 32ch |
|---------|---|------|
| Battery | Rechargeable LiPo battery; charging time <5 h | |

| AUTONOMY | 16ch | 32ch |
|---------------------|-------------|-------------|
| Bluetooth | Up to 10 h | Up to 7 h |
| SD card | Up to 9 h | Up to 6.5 h |
| Bluetooth + SD card | Up to 8.5 h | Up to 6 h |

| GENERAL | 16ch | 32ch |
|---------------------|-----------------------|------------------------|
| Dimensions / weight | 83 x 72 x 27 mm; 130g | 83 x 72 x 27 mm; 135 g |
| Warranty | 2 years (amplifier) | |
| Certifications | CE, FCC, ISED | |

SOFTWARE

BITBRAIN CORE RESEARCH SOFTWARE (Included with equipment)

Bitbrain SennsLite

Real-time visualization, data recording, and synchronization across all Bitbrain devices. Compatible with LabStreamingLayer (LSL) for third-party real-time I/O (BCI2000, OpenVibe, NeuroPype, Medusa). Data export in CSV and EDF, compatible with common analysis software: Python (MNE, etc), Matlab (EEGLAB, FieldTrip, BCILAB, etc), and more. Compatible with Windows OS and Linux (x86).

Bitbrain SDK

SDK in C for maximum performance and portability enabling Python integration. Compatible with Windows OS and Linux (x86).

BUNDLE INCLUDES

- Amplifier
- EEG cap and chinstrap
- Set of EEG electrodes and connectors
- Water-based sensors / sponges
- Sensor holders and sensor sockets
- Measuring band
- ExG sensor set
- Photodiode / optical trigger
- Isolator accessory for wired/USB operation
- Cap/head stand support
- Cap washing/support accessory
- EEG connector protective covers
- Charger and adapters
- Redesigned kit and packaging presentation

Discover how **Bitbrain technology is applied across various research fields.**

Access the online version [here](#), or scan the QR code to view it on your device



Explore our open-access datasets
and other resources for the scientific
community on our website.

For the online version, [click here](#) or scan the
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