

# Emotiv

## Flex 2.0 Gel

### Flex Gel Sensor Kit 2.0

NEW & IMPROVED

# FLEX 2.0 GEL

32-CHANNEL WIRELESS GEL EEG HEAD CAP SYSTEM

## High-Density Gel EEG, Unlimited Research Flexibility

Delve Deeper into the Intricacies of the Human Brain with EMOTIV's High-Density Wireless Gel EEG Head Cap System.



## FLEX Gel Features

Experience unrivaled EEG data granularity and research flexibility with EMOTIV's most precise EEG device yet. FLEX Gel is a 32-channel EEG head cap system that offers researchers the high-density, flexible sensor placement of traditional head cap systems with EMOTIV's industry-leading wireless EEG technology.

### 32-Channel EEG for Whole-Brain Sensing

### Flexible Sensor Placement on the 10-20 System

Optimal placement for capturing granular EEG data.

### Gel Sensors

Comfort & continuous sensor conductivity.

Maintain consistent sensor conductivity without interrupting your studies.

### Battery Status: initial 10 second status display up to 6 hours of battery life

Initial 10-second battery status display. Up to 6 hours of battery life.

### Bluetooth 5.2: Enhanced real-time data transmission



## Variety of Flex Cap Sizes

Choice of 54 cm, 56cm, or 58cm cap sizes for comfort & conformity.

**NEW**

## Smart Storage

The included travel case is the smart solution for storing and transporting your FLEX. Made from durable EVA foam, the case provides protection and organization for FLEX and its accessories. A dedicated compartment for your Flex Cap allows airflow keeping it in optimal condition.

## Flex Your Research Capabilities

Unlike traditional EEG head cap systems that keep participants tethered in a lab, Flex's wireless controller allows you to conduct contextual brain research.

## High-Density Brain Monitoring in a Wireless EEG Device



### Research-Grade EEG Sensors

32 saline silver–silver chloride sensors.



### 9-Axis Motion Sensor

Accurately detects head movements.



### Connects Seamlessly with PRO

128Hz and 256Hz EEG data transmission in a wireless device.



### Optimal Spatial Resolution

Flex Cap's 74 openings allow you to pinpoint a subject's brain activity with greater accuracy.



### Common-Mode Noise Rejection

Captures high-quality, reproducible data.



### Flexible Controller Positioning

Position the FLEX controller at the top or rear of the head for optimal comfort.

# Emotiv Flex 2.0

## Flex Saline Sensor Kit 2.0



**FLEX 2.0**

### Re-Engineered for Advanced Precision & Usability

FLEX features the latest Bluetooth(R) 5.2 chip and advanced antenna design, transmitting contextual EEG data with greater precision.

<b>256 SPS Per Channel</b> Higher temporal resolution & enhanced signal fidelity.	<b>Up to 64Hz Motion Sensor Data</b> Transmit full-resolution motion data.	<b>16-bit Channel Data</b> Uncompressed, granular data.	<b>No Slew Rate Limits</b> Time-locked EEG, ECG, EMG & EOG signals.
<b>Advanced Antenna</b> Provides a stable connection & extended research capabilities.	<b>Power LED</b> Easily identify FLEX's battery life.	<b>USB-C Charging Port &amp; Power Cable</b> For faster charging.	

## Full Specifications

### EEG support

Up to 32 channels: configurable

2 references: CMS/DRL configurable in any 10–20 location or on ears (compatible ear clips for sensors included)

Available data: raw EEG and frequency band data. Requires **PRO License** for use.

### EEG signals

**NEW** Sampling method: Sequential sampling, dual ADCs

**NEW** Sampling rate: 2048 Hz internal downsampled to 256SPS.

**NEW** Motion Resolution: 16 bits 1 LSB = 0.51 $\mu$ V

**NEW** Bandwidth: 0.16 – 43Hz, digital notch filters at 50Hz and 60Hz

Dynamic range (input referred): 8400  $\mu$ V(pp)

Coupling mode: AC coupled

**NEW** No slew rate limits: Time-locked EEG, ECG, EMG & EOG signals

### EEG sensors

**Electrode count:** 32 recording electrodes, 2 reference electrodes

**Sensor material:** sintered silver-silver chloride, compatible with gel

**Size:** profile height – 3.5 mm; central opening diameter – 6 mm

**Wire length:** 36 cm

## Motion sensors\*

IMU part: ICM-20948

Quaternions: normalized, 4D

Accelerometer: 3-axis +/-8g

Magnetometer: 3-axis +/-112 gauss

**NEW** Transmit full resolution motion data: Up to 64Hz motion sensor data

*\*Software support for motion data coming soon.*

## Flex Cap

Available sizes: 54 cm, 56 cm, 58 cm

Variety of Flex Cap Sizes: Comfort & conformity for optimal EEG data

Openings: 74 in the standard 10-20 positions

Pockets for control box: At approximately Iz (for awake studies) and Cz (for sleep studies)

Manufacturer: EasyCap

## Connectivity

Proprietary USB receiver (included): 2.4GHz band

*USB 2.0+ (only available with EMOTIV Extender)*

**NEW** Micro USB-C port & power cable (included): for faster charging

**NEW** Bluetooth 5.2: Enhanced real-time data transmission

## Power

Battery: Internal Lithium Polymer battery 595mAh

Battery life: up to 6 hours

**NEW** Power LED: Easily identify Flex Controller's battery life



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