



SENTIMO

Wireless Biosensor

EMG
IMU



- High fidelity (up to 16 kHz)
- Compact and lightweight
- Modular and scalable cables

SENTIMO delivers precision quality and flexible measurement options with unrivaled abilities.

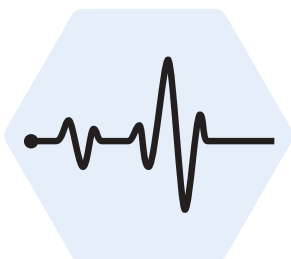
The Sentimo Sensor System

Hardware Features

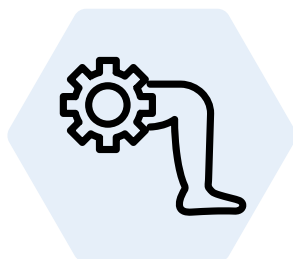
- Up to 16 kHz EMG sampling rate
- 24-bit internal resolution
- ± 9.4 mV EMG input range
- Baseline noise < 1 μ V
- Shielded cables for artifact reduction
- Variable channel count (1-4 channels per device)
- Integrated 9-axis IMU
- Lossless data compression
- Up to 20 channels stream
- 4-8 hour battery life
- Small form factor (9.5g)
- Wireless BLE communication
- Modular lead connection (pinch or DIN port)

Integrated Movement Technology

SENTIMO allows users to collect biosignals in clinical, laboratory, and real-world settings



**EMG
Analysis**



**Biomechanics
Assessment**



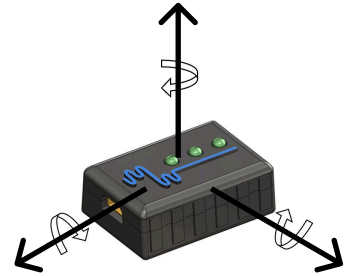
**Biofeedback
Training**



**Prosthesis
Control**

The EMGenius software features an easy-to-use toolset for visualizing and collecting kinesiological data.

Real-Time Data Acquisition and Visualization



Live EMG & Motion Data Streaming

View muscle activity and motion data in real-time

High-Resolution Signal Processing

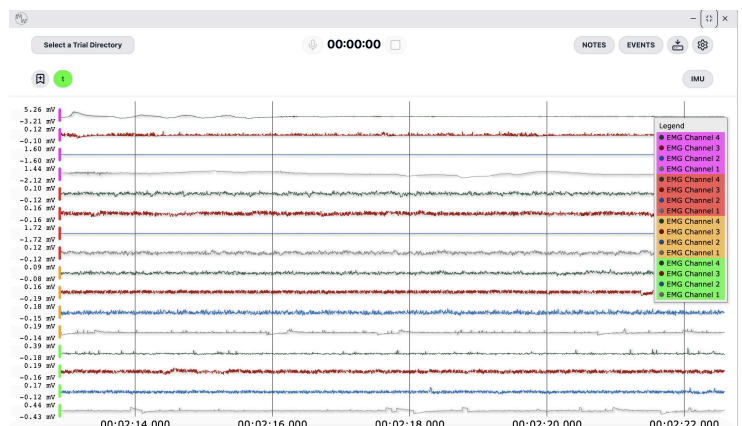
Advanced filtering and custom analytics

Customizable Display

Adjust scaling, channel display, and IMU 2D/3D plotting

Comprehensive Software

- Auto-connect and stored settings
- Configurable filtering
- Internal and external triggers
- Real-time visualization
- Integrated data review
- Synchronized across devices



Technical Specifications

Portable Amplifier Unit

- 1 to 4 channels per unit
- 4 devices on a bluetooth network
- 21.5 mm x 31.5 mm x 11.5 mm
- 9.5 g weight

Software Capability

- 16+ channel emg and 4 channel IMU display
- Flag and event placement
- Configurable auto-export
- Lossless data reception
- Custom filter and computation
- Restful API with web socket

Trigger Unit

- BNC Connector Input
- Variable de-bounce time
- USB compliant output

Carry Case

- Custom carry case with on-board power bank (5 full charge cycles)

EMG Specifications

- Up to 16 kHz sample rate
- >65 db SNR
- 100db CMRR
- 9.375 mV dynamic Range
- In-software adjustable gain
- 24-bit resolution
- Simultaneous sampling across units

IMU Specifications

- 150 Hz sample rate
- Quaternions or RPY
- 2D/3D visualization

Power

- 6-8 hour battery life
- Full recharge in 20 minutes

Material

- Medical grade polycarbonate shell

Communication

- 2.4 GHz wireless and Bluetooth Low Energy
- 30 m wireless transmission range