

# biosignalsplux Researcher

Combines all the hardware and add-on software essentials that fulfil your typical research needs.

This 8-channel tool-kit was designed to keep advanced research applications on budget while allowing wireless and high-quality signal acquisitions without limitations. This kit comes with 8 professional sensors of your choice to fit as best as possible to your research applications.

biosignalsplux enables up to  $\sim$ 10h of signal streaming at up to 3000Hz sampling rate and 16-bit resolution per channel while recording data from up to 8 sensors simultaneously. Due to its compact design, biosignalsplux can even be used for signal acquisition in dynamic conditions. Additionally, the Video Synchronization add-on allows the users to record videos during signal acquisition sessions to visualize all acquired signals synchronously with the recorded video for post-acquisition analysis purposes (e.g. movement analysis).

#### **Kit Content:**

- 1x Wireless 8-channel hub (specs below)
- 8x <u>Professional Sensors</u> of your choice
- 1x Bluetooth Dongle
- 1x medical-grade charger
- 24x pre-gelled & disposable electrodes
- 1x portable & rugged storage case
- 8h personalized technical support

## **Hub Specifications:**

- Analog ports: 8 generic inputs
- Auxiliary Ports: 1 digital I/O + 1 ground
- Resolution: Up to 16-bit (per channel)
- Sampling Rate: Up to 3kHz (per channel)
- Internal Memory: none (16GB optionally available)
- Battery Life: ~10h streaming
- Communication: Bluetooth Class II
- Size: 85x54x10mm
- Weight: 45g (without sensors)
- Color: White

## Documentation & Downloads:

- Quickstart Guide
- User Manual
- Datasheet
- OpenSignals & Add-Ons User Manual
- biosignalsplux Firmware v.3.7 (incl. Installer)

#### Software:

- OpenSignals (r)evolution (Windows, macOS, Linux)
- Video Synchronization Add-On for OpenSignals (r)evolution
- OpenSignals Mobile (Android)
- Application Programming Interfaces (APIs) & Sample Code on GitHub

## Selectable Sensors - Professional Sensors:

This biosignalsplux kit comes with up to 8 Professional Sensors of your choice from the sensors listed below:

- Accelerometer (ACC)
- Electrocardiography (ECG)
- Electrodermal Acitivity (EDA)
- Electroencephalography (EEG)
- Electromyography (EMG)
- <u>Electrogastrography (EGG)</u>
- Electrooculography (EOG)
- Force (FSR)
- Light (LUX)

- Respiration (PZT)
- <u>Temperature (TMP)</u>

Extra Sensors - Advanced Sensors:

Extend the capabilities of your biosignalsplux kit with these extra sensors:

- Functional Near-Infrared Spectroscopy (FNIRS)
- SpO2 (Finger Clip)
- Sp02 (Versatile)
- Blood Volume Pulse (BVP)
- Goniometer (GON)
- Load Cell
- Respiration (Inductive)
- Glucose Meter Reader (GMR)
- Blood Pressure Reader (BPR)
- SpO2 Reader (OSL)
- Vaginal EMG (V-EMG)

## Useful Links:

- biosignalsplux Documentation
- <u>biosignalsplux Sample Signals</u>
- biosignalsplux Publications