

CGX A Cognionics Company



2019 Price List

CGX. The leader in mobile EEG Solutions for real-world neurophysiological monitoring.





Auris In-Ear EEG

Unique in-ear EEG for researchers. Comfortable and light-weight with excellent signal quality. Wear the tethered electronics and batteries around neck, or place near subject. Comfortable design and tethered electronics make it perfect for sleep studies and discrete real-world EEG recordings.

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Auris In-Ear System

Auris In-Ear and Chest ECG

Practitioner Level

- Comfortable for overnight sleep studies
- 16 hour battery life in microSD mode
- Full access to raw data
- Designed for research
- Up to 6 additional ExG channels with optional dongle (*available Fall 2019*)

Use for sleep studies, exploratory research, and long-term data collection



Replaceable HydroFlex earbuds are comfortable all night long.

Auris In-Ear EEG for Researchers

Technical Overview

Wireless Amplifier

A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters Sampling rate: 250/500/1,000/2,000 samples per second

Bandwidth: 0-131/262/524 Hz (depending on sampling rate), with true DC coupling Storage through microSD and microSDHC 3-axis accelerometer measures head motion Wireless Range: 20 meters Noise: 0.7 μV RMS from 1-50 Hz, shorted inputs

Sensors

Active electrodes at earbud tips Polymeric soft-earbud sensors

Cleaning

Hand-wipe between sessions Replace earbud electrodes between subjects

Data Stream

Bluetooth On-board SD card Full access to raw data via real-time streaming API Continuous impedance check with real-time monitoring of all channels simultaneous with EEG

Export data to EDF, BDF, or CSV

Power

Lithium-ion: 8 hour battery life in wireless Bluetooth mode and 16 hours in microSD mode

General

Weight: 90 grams Channels: right-left ear, chest ECG, 6 ExG (with optional adaptor available Fall 2019)

Auris

Auris

Around-The-Neck Wireless Amplifier Bluetooth Dongle 20 HydroFlex Earbud Sensors 30 Sticky Pad/ECG Sensors USB Charging Cable Wall Plug Carrying Case 2 Year Warranty



All Sessions

Use silicon wings on earbuds for added stability.

Moisten HydroFlex earbud tips with a dab of water for enhanced contact and conductivity. Use SD card (not included) for extended recordings without a computer.







Quick Series Dry Headsets

The industry-leader in signal quality — improved for 2019.

The CGX Quick Series is well known for generating research-level data from our active dry and semi-dry polymer electrodes. Our latest iteration (build 3.0) incorporates mechanical and structural enhancements for faster set-up and 60 minute wear time.

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Quick Series Headsets

Quick-20 8 or 20 Channel Systems.

Practitioner Level

- EEG amplifier and wireless electronics integrated into headset.
- Flexible composite arms create good contact between the sensors and head.
- Fits adolescents through adults. Child-size available.
- Add up to 4 additional ExG leads.

- Use the systems in wireless mode, and capture data on-board with an SD card.
- Dual batteries provide 12 hours of uninterrupted data gathering.
- Standard 10-20 montage.
- Millisecond precise event synchronization with optional wireless trigger.
- Multi-modal physiological recording (ExG, GSR, SpO2, Temperature, and Respiration) with optional AIM Gen2.



Fully mobile, fully wireless.

- 3 Minute setup.
- Put headset on subject
- Check impedance map (software included)
- Adjust sensors if required for comfort and contact
- Begin wireless data acquisition

Quick Series Dry Headsets

Technical Overview

Wireless Amplifier

A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters.

Sampling rate 250/500/1,000/2,000 samples per second.

Bandwidth 0-131/262/524 Hz (depending on sampling rate), with true DC coupling. Storage through microSD and microSDHC. 3-axis accelerometer measures head motion. Compatible with optional CGX Wireless Trigger.

Compatible with optional AIM Gen 2.

Sensors

Active electrodes and active shielding for highest signal quality. Choose DryPad, Flex, or HydroFlex sensors at any position.

Data Stream

Bluetooth.

On-board SD card. Full access to raw data via real-time streaming API

Continuous impedance check with real-time monitoring of all channels simultaneous with EEG.

Export data to BDF, EDF, or CSV. Compatible with NeuroPype, LabStreaming Layer, EEGLAB, BCILAB, MATLAB, BCI2000,

OpenViBE, Neuroguide and more. Open API allows you to build your own applications.

Power

Lithium-ion: 10 hours wireless, 12 hours with microSD card.

Cleaning

Hand wipe between sessions.

General

Quick-8, Quick-20: 450 grams. Fits heads sized 52-62 cm. Child size available separately, fits heads 48.5-56.5 cm.

Available Systems

Quick-8

Quick-20 (v 3.0) Headset with 8 hot positions, plus 4 ExG Channels with Optional Module 8 Channel Wireless Amplifier 10 DryPad Sensors 10 Flex Sensors 10 HydroFlex Sensors + Solution and Applicator 3 Earclips 3 Leadwires 10 Extenders 4 Batteries 2 Chargers Carrying Case 2 Year Warranty Quick-20

Quick-20 (V 3.0) Headset, plus 4 ExG Channels with Optional Module 20 Channel Wireless Amplifier 20 DryPad Sensors 40 Flex Sensors 20 HydroFlex Sensors + Solution and Applicator 3 Earclips 3 Leadwires 10 Extenders 4 Batteries 2 Chargers Carrying Case 2 Year Warranty

Use Considerations

Laboratory Sessions

Be aware sweat causes drift and noise in the signal.

Position headsets so forehead pods are directly above the eyebrow. Setting the headset high on the head decreases comfort and signal quality. Watch the online video for instructions on best fit.

Field-Based Sessions

Can be used in virtually any environment.

Wet-Cap Like Performance Use HydroFlex sensors with solution for wetcap like measurements.







Quick-30 Dry Headset

The industry-leader in signal quality — improved for 2019.

Designed for researchers requiring the highest signal quality in a standard 10-20 montage. The Quick-30 (v 3.0) incorporates a host of mechanical and structural enhancements for faster set-up, and significantly increased durability and wear-time.

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Quick-30

Research Level

- EEG amplifier and wireless electronics integrated into headset.
- Flexible composite arms create good contact between the sensors and head.
- Fits adolescents through adults.
- Use the systems in wireless mode, and capture data on-board with a built-in SD card.
- Dual batteries provide 12 hours of uninterrupted data gathering.
- Add up to 2 additional ExG leads.
- Millisecond precise event synchronization with optional wireless trigger.
- Multi-modal physiological recording (ExG, GSR, SpO2, Temperature, and Respiration) with optional AIM Gen2.



All Quick Series headsets are fully mobile.

Quick Series Dry Headsets

Technical Overview

Wireless Amplifier

A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters.

Sampling rate 250/500/1,000/2,000 samples per second.

Bandwidth 0-131/262/524 Hz (depending on sampling rate), with true DC coupling. Storage through microSD and microSDHC. 3-axis accelerometer measures head motion. Compatible with optional CGX Wireless Trigger.

Compatible with AIM Gen 2 (optional).

Sensors

Active electrodes and active shielding for highest signal quality. Choose DryPad, Flex, or HydroFlex sensors at any position.

Data Stream

Bluetooth. On-board SD card.

Full access to raw data via real-time streaming API.

Continuous impedance check with real-time monitoring of all channels simultaneous with EEG.

Export data to BDF, EDF, or CSV. Compatible with NeuroPype, LabStreaming Layer, EEGLAB, BCILAB, MATLAB, BCI2000, OpenViBE, Neuroguide and more. Open API allows you to build your own applications.

Power

Lithium-ion: 10 hours wireless, 12 hours with microSD card.

Cleaning

Hand wipe between sessions.

General

610 grams. Fits heads sized 52-62 cm.

Quick-30

Quick-30

Quick-30 (V 3.0) Headset plus 2 ExG Channels with Optional Module 30 Channel Wireless Amplifier 30 DryPad Sensors 60 Flex Sensors 30 HydroFlex Sensors + Solution and Applicator 3 Earclips 3 Leadwires 20 Extenders 4 Batteries 2 Chargers Carrying Case 5 Year Warranty

Use Considerations

Laboratory Sessions

Be aware sweat causes drift and noise in the signal.

Position headsets so forehead pods are directly above the eyebrow. Setting the headset high on the head decreases comfort and signal quality. Watch the video on our website for

instructions on best fit.

Field-Based Sessions

Can be used in virtually any environment.

Wet-Cap Like Performance

Use HydroFlex sensors with included solution for wet-cap like measurements.







High Density Headsets

The only 128-channel wireless and wearable EEG system available.

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Designed for the most sophisticated neurological experimenters. A quick-install wetcap based system with active electrodes in a standard 10-10 (64-Channel) or 10-5 (128-Channel) configuration, all with a detachable amplifier for the freedom to conduct even the most demanding experiments.

Mobile Series Headsets

Mobile Series

64 or 128 Channel Systems.

Research Level

- Electrodes placed in a standard 10-10 or 10-5 configuration plus additional locations.
- Uses a custom-configured wet cap for simple set-up.
- Wireless removable amplifier streams data via Bluetooth or SD Card.

Mobile 128

• The only high-performance, truly mobile headset with 128 active EEG and auxiliary physiological channels with optional Aim Gen2.

Multi-Subject Testing

• Use the removable amplifier to test multiple pre-prepped subjects.



Mobile Series High Density Headsets

Technical Overview

Wireless Amplifier

Precise 24 bit A/D resolution at 500 samples/ sec and 1,000 samples/sec at 64 channels. Bandwidth 0-131/262 Hz (depending on sampling rate), with true DC coupling. Wireless range up to 15 meters distance. Storage through microSD and microSDHC Cards.

6-axis IMU (Acc + Gyro) motion detection measures head motion. Compatible with our AIM Gen2 (optional).

Sensors

Active Ag/AgCl electrodes secured in cap ensure highest signal quality even under motion.

Data Stream

Full access to raw data via real-time streaming API.

Export data to BDF, EDF or CSV. Open and unrestricted data access compatible with NeuroPype, LabStreamingLayer, EEGLAB, BCILAB, MATLAB, BCI2000, OpenViBE and more. Build custom applications in MATLAB, C, C++, C#, Java or Python.

Power

Lithium-ion: 6 hours wireless, 8 hours with microSD card.

Cap Cleaning Detach cap from electronics to wash.

General

Lightweight 460g design for long-term use without fatigue. Fits heads sized 52-62 cm.

Available Systems

Mobile-64

3 Wet Caps (54, 58, 60 cm) 64 Channel Active Electrode Bundle 64 Channel Wireless Amplifier Electrode Gel plus Syringe 2 Batteries Charger Carrying Case 5 Year Warranty

Mobile-128

3 Wet Caps (54, 58, 60 cm) 128 Channel Active Electrode Bundle 128 Channel Wireless Amplifier Electrode Gel plus Syringe 2 Batteries Charger Carrying Case 5 Year Warranty

Use Considerations

All Sessions

Carefully prep and gel the reference and ground sites first.

We provide 3 caps and 1 leadwire bundle with each Mobile system, although we recommend purchasing spare caps and a spare lead wire set to minimize downtime due to cleanup and drying.

Remove amplifier before cleaning headset.

Carefully dry lead wires before using. Follow recommended factory maintenance for lead wire bundle. Sweat may cause drift artifacts in EEG recordings.



CAMP Compact Amplifier

For Use With 10-20 Montage Wet Caps

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Our newest amplifier has 20 channels and is small enough to fit in your hand. Amplifier includes standard DB-25 connector for off-the-shelf wet caps.

CAMP Compact Amplifier For wet or dry systems

Practitioner Level

- Compact Wireless Amplifier (data acquisition unit) stores data on an SD card, or streams via bluetooth.
- 10 hours of battery life.
- Includes DB-25 Adaptor.
- Robust, and built for continual usage.
- Low-Energy Bluetooth.



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Wireless Amplifier

A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters. Sampling rate 500 samples per second. Bandwidth 0-131 Hz (depending on sampling rate), with true DC coupling. Storage through microSD and microSDHC. 3-axis accelerometer measures head motion. Compatible with CGX Wireless Trigger (optional).



Provide wet-cap vendor this pin-out connection.

Data Stream

Low-Energy Bluetooth. On-board SD card. Full access to raw data via real-time streaming API. Continuous impedance check with real-time monitoring of all channels simultaneous with EEG. Export data to BDF, EDF, or CSV. Compatible with NeuroPype, LabStreaming

Compatible with NeuroPype, LabStreaming Layer, EEGLAB, BCILAB, MATLAB, BCI2000, OpenViBE, and more.

Power

Lithium-ion: 6 hour wireless, 10 hours with microSD card.

General

Weight: 100 grams (with DB-25 Adaptor) Dimensions: 89 x 70 x 23 mm

Model	US	Price	Dist Price

CAMP		
Compact		
Amplifeir	\$4,000	\$2,600

Dev Kit

Versatile Development Kit

The Dev Kit includes everything you need to undertake EEG experiments and custom hardware development: a 32-channel amplifier, inputs for CGX dry electrodes, ExG's, and traditional wet caps. Also included is a headband for mounting dry electrodes.

Dev Kit

Up to 32 Channel System 📑

Practitioner Level

- Soft, washable fabric band with reinforced polymers for a snug, artifact-resistant fit.
- Standalone Amp (data acquisition unit) attaches to headband, stores data on an SD card, or streams viabluetooth.
- 10 hours of battery life.
- Configure loose lead lines to meet your experimentation needs.
- Compatible with all CGX sensors.



Included In Kit

CAMP Compact Amplifier Lead Wire Adaptor (for use with CGX sensors) DB-25 Adaptor (for use with a 10-20 wet cap) Low-Energy Bluetooth Dongle Adjustable Headband 10 Drypad Sensors 10 Flex Sensors 10 HydroFlex Sensors 10 Sensor Adaptors 30 Sticky Pad/ECG Sensors 10 3.5mm Cables 9 Active Pods 1 Ground Pod **USB** Charging Cable Wall Charger Carrying Case

Headband holds up to 8 active, shielded dry electrode pods.

Use Considerations

All Sessions

Use wet electrodes for REF and GND with high intensity sessions. Use microSD card for reliable data logging. Wash band by hand.

Wet

Use included standard DB-25 Adaptor. System compatible with off-the-shelf EEG Caps. (See CAMP Compact Amplifier for pinout requirements.)

Kit includes CAMP Compact Amplifier, Lead Wire Adaptor for CGX Sensors, DB-25 Adaptor for wet caps, CGX Data Acquisition software.

Dry Sessions

Use CGX Sensors. Tuck active electrode pads under headband for stability.

Custom

Detach amplifier for use with your own custom harnesses/mounting system. High density header connector provides access to 32 channels. Use Low-Energy Bluetooth interface for PC, iOS, and Android development.

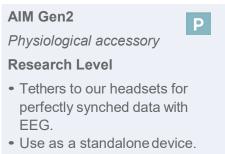


Compatible with MATLAB/ EEGLAB, Lab StreamingLayer, Neuropype, BCI2000, OpenViBE, Brain Vision Analyzer, Neuroguide and more.

AIM Gen2 Physiological Monitor

Combine mobile EEG with advanced physiological monitoring.

Everything you need to measure physiological response. The AIM Gen2 is a compact, sophisticated unit that adds heart rate, temperature, respiration, GSR, PPG/HRV/SpO2 and more to any EEG system.



- Stream wirelessly via Bluetooth, or write to an SD Card.
- Bundled with ourproprietary physiological sensors.
- Compact design clips onto belt, or sits on surface.
- 6 hours of battery life.







Attach to armband. Leads stay neat and organized.

Aim Gen2 Physiological Monitor

Technical Overview

Wireless Amplifier

Compatible with all CGX headsets. CGX headsets support our patent-pending millisecond wireless triggering system in standalone mode. Compatible with CGX Wireless Trigger (optional).

Sensors

Auto-switching referential or bipolar ExG. Bioimpedance-based respiration sensor. PPG/HRV/SpO2. 12- bit solid state temperature. GSR (EDA). Third party sensing through 2 BIN-5, bipolar connectors with 5v analog inputs.

Data Stream

Export saved data in EEG or CSV (text). LabStreaming real-time output. Stream data using the simple API in C, C++, C#, Java, MATLAB or Python. Build your own applications.

Included

AIM Gen2

AIM Gen2 Wireless Amplifier 8 Sensor Leads Ground Lead PPG/HRV/SpO2 GSR Temperature Sensor Respiration Sensor Set 150 ECG Electrodes 2 Batteries Charger Carrying Case 2 Year Warranty

Use Considerations

Tethered Mode

Connect the AIM to our headsets to synchronize your EEG data with other physiological measurements.

Standalone Mode

Stream to our acquisition software, record directly to an on-board SD Card, and receive triggers independently from the EEG headset.



Accessories

Wireless Trigger

Millisecond precision triggering device.

Any serious EEG system needs to send accurate and precise time markers for triggers and events. The CGX patented triggering system broadcasts time markers with millisecond precision, without latency and jitter, and no need for software or algorithmic timing compensation.

Wireless Trigger

- Accepts wired EEG system inputs — 8-bit TTL interface via DB-25, RS232 serial via DB-9, USB virtual serial port.
- Wireless broadcasting sends information to a limitless number of in-range receiving systems for multi-subject group research.
- Compatible with virtually all popular triggering and stimulus presentation packages including E-Prime, Presentation, and more.





Patented Sensors

We optimized our patented sensors for research-grade data acquisition without the need for prep or gels. Sensors snap into the headset and can be freely mixed and matched. Bundled with Quick Series and Dev Kit.

DryPad





Use the patented DryPad for direct skin contact. Lifecycle: 1,000 uses. Sold in packs of 10 each.



Flexible legs glide through even the thickest hair. Polymer material holds tight, yet flexes for maximum comfort. Lifecycle: 200-400 uses. Sold in packs of 10 each.

HydroFlex Earbuds



HydroFlex



High quality pliable sensors for sensitive skin. Dab with solution to achieve wet sensor response. Lifecycle: 50 uses. Sold in packs of 10 or 100 each.



High quality super-soft sensors for in-ear use with the Auris headset. Lifecycle: 50 uses. Sold in packs of 10 or 100 each.

Direct Connect

Connect any amplifier directly to a PC via USB with this connection/ isolation dongle and cable. Max 500 Hz for 128, 1 kHz for 64, 2 kHz for all others.



Extenders Use to increase sensor depth by 2mm

Sensor Lead For AIM Gen2.

3' lead wire built

for ECG data

acquisition.



Earclip

For Quick Series headsets: Use for REF or A2. 1' lead length.

ExG

Extension module adds 2 ExG channels to Quick Series headsets.



