

B-Alert[®] X Series

MOBILE EEG

The B-Alert wireless EEG systems delivers high-quality EEG and physiological signals for non-medical use. The wireless, portable design of the B-Alert allows mobility during recordings, while also aiding in the reduction of signal artifacts typically encountered with wired systems. With an all-soft interface and small, lightweight enclosure, the B-Alert systems can be worn comfortably for hours and are robust to withstand a variety of laboratory and real-world environments. New features include audio notifications, longer lasting battery power, and faster impedance checks. The X-Series Software and SDK are also included with each headset to enable the development of custom applications, with vast potential for integration possibilities.



B-Alert Product Features:

- Dependable Bluetooth wireless encoding
- 11 hour rechargeable battery life*
- On-board accelerometer to quantify head movement and position
- Sizing options to fit children through adults
- Rapid removal and easy cleaning for repeated use

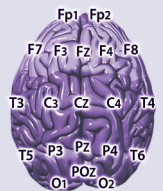
**Typical acquisition time*



B-Alert[®] X24

*Ideal for EEG-based Biomarkers
and NeuroRehabilitation*

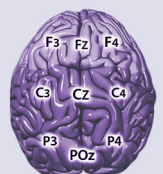
- Up to 24 channels sampled at 256 Hz
- International 10-20 system (+POz) and one optional channel for ECG, EOG, or EMG
- Comfortable, unobtrusive design sets up in about 20 minutes
- Performs full functionality with NeuroGuide Software[®]



B-Alert[®] X10

*Optimal for NeuroMarketing and
Team NeuroDynamics*

- Up to 10 channels sampled at 256 Hz
- Reduced International 10-20 system and one optional channel for ECG, EOG, or EMG
- Lateral and midline montage applied in less than 10 minutes
- Contains sensor sites required for running Cognitive State and Cognitive Workload Metrics*



SPECIFICATIONS

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EEG:	Number of channels	23	9
	Dynamic range	+/- 1,000µV	
Optional:	Number of channels	1	1
	Dynamic range	+/- 1,000 - 2,000µV	
Sampling rate		256 samples/second - all channels	
Resolution		16 bit	
Input impedance		500 MΩ, typical	
Common mode rejection ratio		-115 dB, typical	
Noise		3 µV peak-to-peak, typical	
Bandpass characteristics		0.1 Hz HPF Firmware, 67Hz LPF Hardware	
Head movement/position		Angles obtained with 3-axis 12-bit accelerometer	
RF band		Bluetooth 2.4 to 2.48 GHz (ISM band), latency < 340ms	
Transmission mode		Bluetooth SPP 2.0- via USB Dongle or External Syncing Unit	
Data transmission power		~10 meters, line of sight with onboard antenna	
Transmission power		Class 2 +4dBm	
Li-ION batteries capacity:		600 mAh	
Power consumption		~ 60 mA	
Typical acquisition time		11 hours of continuous wireless	
Battery charging		Via USB cable connected to USB port or USB wall charger	
On-line impedance monitoring		Initiated by host computer using Bluetooth	
Head unit dimensions		Size: 2.7”(L) x 1.9”(W) x 0.8”(H); Weight: 2.0 ounces	
User control		On/Off	
Indicator LEDs		Green/Amber	
SENSOR HEADSET & ACCESSORIES			
Sensor array		Referential: either Standard 10-20 (+ POz) or Neurological	Referential: Fz, F3, F4, Cz, C3, C4, POz, P3, P4
Sensor strip sizes		X-Small, Small & Medium – each site +/- 1 cm of 10-20 system	
Electrode cream		Highly conductive electrolytes and preservatives in hypoallergenic base, buffered to skin pH	

Indications for Use:

The B-Alert System is not intended for the diagnosis or treatment of patients. They are intended for non-medical applications (e.g., human factors, ergonomics, neurogaming, neuromarketing, neuroleadership, team neurodynamics, brain computer interfaces, etc.) and IRB-approved human subject research.