



NeoRecCap can be used for education, research and development in EEG, neuro-computer interfaces (brain-computer interface, direct neural interface, brain interface), bio-feedback (BCI), neuromarketing, neurogaming, brain fitness.

Advantages

- 16 DC EEG channels for biomedical and research applications
- 24 bit resolution
- BLE wireless for PC and mobile application
- lightweight and small EEG amplifier
- 12 sizes of cap cover from 24 cm up to 66 cm of head circumference
- quality Ag/AgCl sintered electrodes
- a wide range of EEG accessories (different types of electrodes, adapters, etc.)



NeoRec cap is intended to record EEG and 3D acceleration events to files of different formats (EDF+ 16 bit, BDF+ 24 bit, GDF 32 bit) or transmit it on-line via stream LSL (Lab Streaming Layer) for analyze by third-party software as MATLAB / EEGLAB, OpenViBE etc.

Specification

Channels	16 DC monopolar according to GND
Dynamic range	±150 mV, ±300 mV
Data resolution	24 bit
Output sampling rate (OSR)	125 Hz, 250 Hz, 500 Hz (8 channels), 1000 Hz (4 channels)
Passband (-3 dB)	0.– 430 Hz @OSR 1000 Hz
Input impedance at DC	more 1 GOhm
Self-noise	2.5 uV p-p @ 0.1.30 Hz
Electrode impedance measuring	1140 kOhm ±10%
Events from internal smart accelerometer	activity (4 steps of sensitivity), change orientation, free fall
Events from button	press
Events from button Check of battery status	press smart by charge/discharge counting
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Check of battery status	smart by charge/discharge counting
Check of battery status Work from full internal battery	smart by charge/discharge counting more 12 hours
Check of battery status Work from full internal battery Charging of internal battery	smart by charge/discharge counting more 12 hours 2.5 hour from +5V USB adapter
Check of battery status Work from full internal battery Charging of internal battery Firmware update	smart by charge/discharge counting more 12 hours 2.5 hour from +5V USB adapter Wireless by special mobile application
Check of battery status Work from full internal battery Charging of internal battery Firmware update Wireless data interface	smart by charge/discharge counting more 12 hours 2.5 hour from +5V USB adapter Wireless by special mobile application BLE 4.2

Set

- EEG amplifier NB2-EEG16
- Electrode cap PROFESSIONAL/BASE NB2-16, size by choose
- Ear electrode PROFESSIONAL/BASE with ear fixator
- USB charger cable, User manual, Plastic box for storage
- NeoRec software for Windows 10 PC (Internet loading)



