

EEG amplifiers NVX

NVX is the DC amplifier with 24, 32 or 48 monopolar channels for electrodes and 4 auxiliary bipolar channels for sensors NeoSens. The device is used in training systems, clinical and scientific researches as a part of computer-based research system for short-term registration of the electro-physiological signals, primarily EEG. The amount of channels and presence of auxiliary channels depends of models.

Basically NVX amplifiers is used with NeoRec application software. NeoRec is software for the acquisition of EEG and other biomedical signals during the process of scientific or medical research. The program records the signals in various file formats for further analysis and processing by third-party software.

Supported file formats: EDF+, BDF+, GDF, EEG, SM.

For viewing or processing the recorded data, the following third-party programs and software packages are recommended: EDFbrowser, Polyman, SigViewer, EEGLAB, ERPLAB, OpenViBE, BioSig.

AVAILABLE MODELS

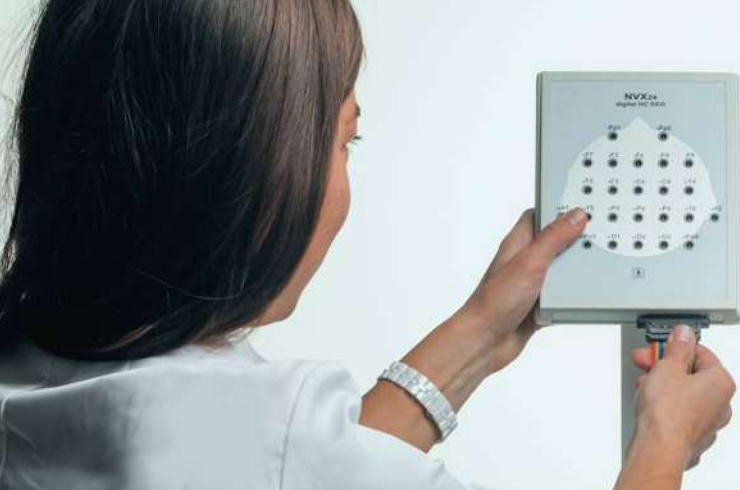
1. NVX24 with 24 EEG DC monopolar channels, 1/1 input/output triggers;
2. NVX36 with 32 EEG DC monopolar channels, 4 DC AUX bipolar channels for probes, 9/1 input/output triggers, OLED display;
3. NVX52 with 48 EEG DC monopolar channels, 4 DC AUX bipolar channels for probes, 9/1 input/output triggers, OLED display.

With EEG amplifiers NVX is recommended to use EEG accessories MCScap and biomedical sensors NeoSens

Internet shop of EEG accessories:
www.mcscap.com

EEG recording at NVX





Based on NVX amplifiers has been developed clinical EEG system NEUROVISOR for use in functional diagnostics rooms, reception and medical departments of multidisciplinary and neurological hospitals, health centers, clinics and research institutes.

Specification

Model	NVX 24	NVX 36	NVX 52
EEG DC monopolar channels	24	36	48
AUX bipolar channels	–	4 galvanic isolated from EEG for probes	
TTL triggers	1 input / 1 output	9 input / 1 output	
Display	–	Graphic OLED	
EEG dynamic range	±400 mV		
EEG channel's input impedance	more 100 MOhm @ DC		
EEG channel's noise	less 0.9 uV p-p @ 0,1...30 Hz		
EEG test signal	200 µV (±1%), 1 Hz		
Electrode impedance measurement range	1...120 kOhm (±10%) @ 30 Hz		
AUX channel's dynamic range	0...+4 V		
AUX channel's input impedance	more 100 MOhm @ DC		
AUX channel's noise	less 15 uV p-p @ 0,1..30 Hz		
AUX probe powering	+5 V (±5%). Up to 15 mA per probe with electronic protection		
Digitalization	24 bit, 6th order delta-sigma modulator with 64x oversampling, one converter per each channel		
Sampling rate	250, 500, 1000, 2000 Hz @ all channels 5000 Hz @ 24 EEG monopolar or bipolar channels 10000 Hz @ 16 EEG monopolar or bipolar channels 50000 Hz @ 4 EEG monopolar or bipolar channels		
Lower cutoff frequency	0 Hz (DC)		
Upper pass rate	75 Hz (-3dB @ 250 Hz); 175 Hz (-3dB @ 500 Hz); 300 Hz (-3dB @ 1000 Hz); 500 Hz (-3dB @ 2000 Hz); 1650 Hz (-3dB @ 5000 Hz); 4900 Hz (-3dB @ 10000 Hz); 16000 Hz (-3dB @ 50000 Hz)		
Control and powering	from USB +5V, 450 mA		
Safety	IEC 60601-1, IEC 60601-2-26, class IIa, type BF		
Size	155 x 110 x 45 mm		
Weight	less 650 gr		