

neuvoTM

The Ultimate Long-term EEG Monitoring System



256 Channel Neuvo wall configuration system

Technical Specifications

Neuvo Amplifier

Monopolar Channel Count	64 Per Headbox, 256 Per System
Bipolar Channel Count	4 Per Headbox, 16 Per System
Maximum Sampling Rate	10,000 Samples / Channel all channels driven
Sampling Method	All Channels Sampled Simultaneous
A/D Resolution	24
Input Impedance	> 10 G ohms
CMRR	> 108 dB
Input Noise	4 μ Vpp, .01 - 100 Hz
Bandwidth	DC to 2030 Hz
Low Pass Filter (Maximum)	-3 dB at 2030 Hz
High Pass Filter (Minimum)	DC or -3 dB at .05 Hz, single pole
Full Scale Input Range (DC Mode)	+/- 200 mV
System Gain (DC Mode)	10
Sensitivity (DC Mode)	30 nV/bit
Full Scale Input Range (AC Mode)	+/- 995uV
System Gain (AC Mode)	2010
Sensitivity (AC Mode)	0.15 nV/bit
Digital (TTL) Inputs	8 Bit Stimulus, 8 Bit Response
High Level Input Range	+/- 5 V
Impedance Measurement	1K Ohm to 50 K Ohm
IMRR	> 127 dB
Headbox Size (h x w x d)	4.5 x 18.7 x 21.8cm, per 64 channels
Headbox Weight	1.5 kg
Device Certification	EU Risk Classification 2B Type CF FDA Class II FDA Product Code GWQ, GWP, GWF, GWE, GWJ

Neuvo Extension

Channels	64, 1.5mm touch proof connector
Format	Patient worn amplifier to patient extension system
Cable Management	All touch proof connections behind cover with strain relieved cloth electrode lead cover

Neuvo System

AC Input voltage range	90 – 264VAC
AC Inrush current	Cold start, 20A at 115VAC, 40A at 230VAC
Isolation	4KVAC RMS to mains, 1.5KVAC RMS to ground.
Power	61W
Mains Connector	10A IEC mail input
Network Connection	10/100 base T with 1500VAC RMS isolation to meet IEC601-1-1
Strobe Connector	DB9 to provide power and control to Compumedics Strobe
Event Button Connector	4 pin Binder supporting up to two event buttons
Trigger Connector	DB25 supporting 8 bits of Stimulus and 8 bit response.
Amplifier Connector	4 MDR26 to support up to 4 Neuvo Amplifiers
Display Connector	DVI-D female to Compumedics Neuvo Display
Camera Connector	Ridel 14 to support attachment of a camera, microphone and PTZ control.
Audio support	In built preamplifier and phantom drive
PTZ support	In built RS-232/RS-485 control port to support various PTZ standards.
Video compression	MPEG1,2,4, H.263, MJPEG
Video resolution	720 by 480 (D1 NTSC) 720 by 576 (D1 PAL) Half D1 SIF QCIF VGA QVGA
Video frame rate	29.97 (NTSC) 25 (PAL) 15 12.5
Audio Encoding	PCM 16bit 48K/44.1KHz ADPCM 4bit 48K/44.1KHz
DC Expansion Connection	4 Pin LEMO to support Isolated DC input module Compumedics Siesta. Up to 4 chained modules.



Neuvo Display

Interface Cable	Single interface cable to Neuro system unit for power and signals. DVI-D
Touch screen operating force	0.05~0.49N (5 ~ 50gF)
Hardness of surface	Pencil hardness 2H minimum against JIS K-5400
LCD Active area	245.76 X 184.32
LCD Pixel pitch	0.240 X 0.240
LCD Resolution	768 x 1024
LCD viewing angle	40 Degrees Minimum 45 Degrees Typical

Environmental specifications

Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 70°C
Operating Humidity	20% to 85% RH non condensing

System Safety Specifications

EN 60601-1	Medical Electrical Devices - General Requirements for Safety
UL2601.1	Including US National Deviations for IEC601-1
CSA22.2	Including Canadian National Deviations for IEC601-1
EN 60601-1-1	Collateral Standard - Systems
EN 60601-1-2	Collateral Standard - Electromagnetic Compatibility
EN 60601-1-4	Collateral Standard - Programmable Systems
EN 60601-2-26	Specific requirements for electroencephalographs

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Compumedics divisions:



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