

nëo™

simplify neonatal care



The first aEEG monitoring solution optimized for every care-taker in the NICU.



ant neuro
inspiring technology

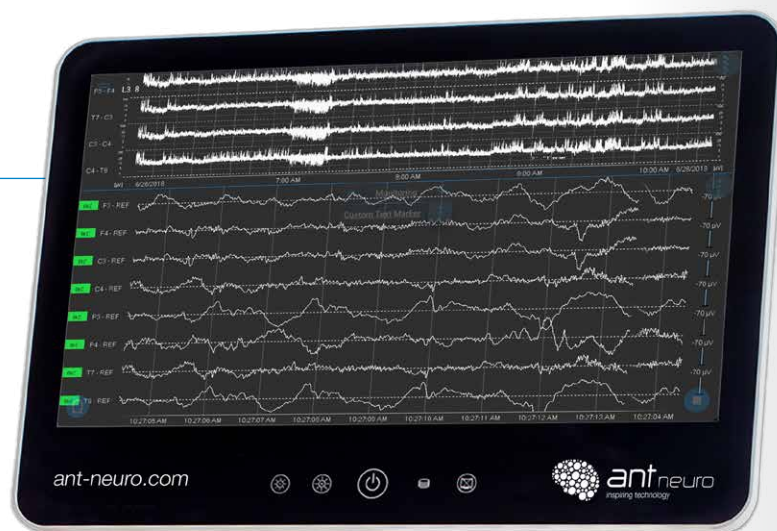
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nëo is the easiest-to-use solution for aEEG and EEG monitoring of the smallest and most fragile patients. nëo simplifies the workflow, from electrode application, event annotation, aEEG review to data export. It optimally integrates into the already busy NICU routine, and allows for both aEEG and EEG monitoring for all pathological term and preterm babies. With up to 8 channels, nëo can record rich data in the background for pediatric neurologists, while 2 channels aEEG are shown for routine monitoring. This allows experts to review valuable information whenever needed, without waiting for additional recordings during the critical phases.

Double value

With 8-channel Continuous EEG, nëo provides diagnostics value to (pediatric) neurologists and an extended coverage for better seizure detection. The view can be easily adapted with a swipe of the finger, to display only the information most relevant to the respective clinician.



Diagnostics support

Graphical indicators for Inter-Burst-Interval (IBI) and Burst Suppression Ratio (BSR) quantify burst suppression patterns and help the bedside personnel to make informed decisions about interventions, such as for seizure and hypothermia (HIE). The IBI indicator quantifies the duration between bursts and can be used to help assess the severity of HIE. The BSR indicator represents the fraction of time the brain has spent in suppression and is highly predictive of adverse outcomes following hypoxic-ischemic injury.



Simplify routine application for greater patient coverage

Non-convulsive seizure can occur with pre-term babies and may damage brain function and delay brain development if not treated on time. By simplifying the electrode application and the software interface, and by reducing the complexity of neonatal monitoring, aEEG monitoring can be applied on more preterm and pathological term babies. The greater patient coverage means better diagnosis and treatment for babies that might otherwise develop pathologies with negative outcomes.

nëo maximizes the efficiency in the CFM routine and helps to monitor all pathological term and preterm babies.

Simplify expert communication for greater care

nëo is optimized for every care-taker in the NICU. The interface is designed to seamlessly integrate into the NICU by providing the right functionality depending on who is currently using the device. While 2 channels aEEG is shown to bed-side staff and neonatologists during monitoring, up to 8 channels of referential EEG can be reviewed by neonatologists and neurologists for differential diagnostics. Data can easily be exported into standard EEG formats at any time for advanced analysis.

With nëo, it is easier than ever before to bring in expert opinion in critical clinical cases.

A platform to grow together

nëo utilizes the most advanced hardware and software concepts available in the market. We use high performance medical computer systems and high-end EEG amplifiers/sensors. nëo is a system designed to be ready for the future. Our nëo monitor software is developed with pioneering neonatologists in the field and our network of experts will allow nëo to continue to grow in the years to come.

nëo is a platform which will ensure NICU care-takers deliver the best care for decades to come.



The user interface

is clean and simple, to allow most efficient control of care.



The software monitoring workflow

provides step-by-step guidance.



Only 2 clicks

to start monitoring.



Access to caps

With actively shielded **waveguard** EEG caps, the application of electrodes has never been easier. It saves valuable time and resource and enables application of more electrodes without extra effort.



Access to single lead electrodes

nēo allows you to monitor with your familiar routine, providing compatibility to gold cup or subcutaneous needle electrodes.



Research grade amplifier

Research grade EEG amplifier with high input impedance for best signal quality.



HD monitor

15" touchscreen monitor visualizes aEEG patterns accurately with great detail

Integrated power supply

Cabling and medical power supply integrated into the device for easier cable management

Designed for NICU

Sturdy and sleek, mobile, minimal cabling, great to use with other modalities (e.g. ECG, Ultrasound imaging, fNIRS while aEEG monitoring), and hardware-side noise reduction

Optimized for servicing and maintenance

Open amplifier integration for easy servicing and maintenance

Flexible mounting

Mount on medical cart, wall/ceiling, or bedside table to save valuable space in NICU

Easy interpretation for every NICU professional

- Simultaneous recording of aEEG and continuous EEG
- Online Burst Suppression Ratio and Inter Burst Interval display
- Up to 8 referential channels EEG with caps
- Quick start of monitoring and data sharing
- Ready inspection of recorded data via online/offline review
- Easy exporting and sharing of data and screenshots at any time
- Quick access to pre-defined and custom annotations in both recording/review modes

nēo for clinical use of aEEG monitoring

- Monitor background aEEG patterns
- Detection of subclinical / non-convulsive seizures
- Evaluate brain maturity and recovery
- Monitor the effects and efficiency of anti-convulsive drugs
- Screen patients for neuroprotective interventions
- Predict neurodevelopmental outcome following perinatal HIE or surgery
- Assess sleep-wake cycling

Technical specifications

Touch screen monitor	
Weight	4.5 kg
Screen size	15", 16:9 Ratio
Dimensions	385 x 290 x 45 mm
Resolution	1920 x 1080 Pixel Full-HD
Mount	Integrated VESA-100 interface

Data Acquisition	
Bipolar channels	6
Referential channels	Max. 8
Max. Sampling Rate	512 Hz
Resolution	24 bit
Input impedance	>1 GΩ
Shielding	Actively shielded inputs
Amplifier size	86 x 100 x 16 mm
Input signal range	150 – 1000 mV _{pp}

Software	
Operation System	Windows 10 (64bit)
Monitoring features	Real-time EEG aEEG (computed) Continuous Burst-Suppression-Ratio (BSR) Continuous Inter-Burst-Interval (IBI) Impedance Measurement Event-Markers Online-Review mode

Hardware	
Processor	Intel Core™ i5
Working Memory	8 GB
Connectivity	1x USB 3.0
Storage	mSATA 250GB SSD
Graphics	Intel® HD Graphics GT-Series
Power supply Unit	Integrated power supply (100-240V)

Product range

Code	nëo™
ES-820	1x nëo monitor software 1x EE-411 eego mini amplifier 1x nëo all-in-one pc 1x nëo cover plate 1x User manual 1x Safety instructions

Code	Compatible accessories
XC-810	Break-out adapter with touch proof sockets
XC-820	Medical cart (<i>Vesa compatible</i>)
XC-821.R	Medical monitor arm for wall norm rails (<i>Vesa compatible</i>)
XC-821.P	Medical monitor arm for poles (<i>Vesa compatible</i>)
XC-822	Medical table stand (<i>Vesa compatible</i>)

Code	Electrodes (<i>in different colors</i>)
XE-382	Single lead cup electrode Au plated with touch proof connector
XE-385.C	Single lead ring electrode Ag/AgCl with touch proof connector
XE-386	Subcutaneous steel needle electrodes
XE-165	Hydrogel Pads

Code	Neonatal EEG caps (<i>in different sizes</i>)	s1=01 (25-27cm), 02 (27-29cm), 03 (29-31cm), 04 (31-33), 05 (33-36), 06 (36-39)
CA-420.s1	EEG cap, 2 electrodes plus GND and REF, P3, P4, shielded, HD-C50pin connector	
CA-421.s1	EEG cap, 4 electrodes plus GND and REF, C3, C4, P3, P4, shielded, HD-C50pin connector	
CA-422.s1	EEG cap, 8 electrodes plus GND and REF, F3, F4, C3, C4, P3, P4, T7, T8, shielded, HD-C50pin connector	

Code	Consumables
XE-153	OneStep Cleargel 500g
XE-154	OneStep Cleargel 1000g
XE-155	OneStep Cleargel 4000g
XE-157	OneStep Cleargel 120g
XE-158	Ten20 conductive paste 114g
XE-377	Blunt syringe needles
XE-011	Single use syringe 10 ml

nëo™ is CE marked as a medical device in the EU, according to MDD 93/42/EEC, class IIa. waveguard™ caps are CE marked as medical device in the EU, according to MDD 93/42/EEC, class I. Manufactured by eemagine Medical Imaging Solutions GmbH, Berlin, Germany, ISO 13485 certified. ANT Neuro and eemagine are part of the neuromotion group.

The information in this document is not intended for users outside the European Union. For use outside the EU please send your inquiry to sales@ant-neuro.com. Please inquire with us about the regulatory status of nëo in your country.

Do you want to know more about this product or become a distribution partner in your country? Receive additional information or schedule a demo? Please contact us via e-mail and we'll come back to you.

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