

neuro™

The Ultimate Long-term EEG Monitoring System

# neuvo<sup>1</sup>

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# vision

Diagnosis of epilepsy is a clinical classification that can only be as reliable as the information that is collected.

Compumedics understands the importance of this and has developed our leading edge system with advanced tools that bring required confidence for clinicians and their teams to make informed medical decisions affecting their patients.

In addition to recording networked high density EEG and extensive digital video, today's Epileptologist want more powerful tools to assist with diagnosis such as measurements of high frequency oscillations prior to and during seizures. They covet DC capability for detection of DC depolarization shift. They desire all these tools on their desktop and through a fully networked remotely accessible configuration.

Compumedics Neuvo is well suited to meet the needs of any Neuroscience laboratory. Building on our technological platforms from Neuroscan research and experience in clinical "Profusion EEG", Neuvo is an intuitive, seamlessly integrated powerful diagnostic and review system. All of the components are available to use either separately or, if needed, as a highly sensitive diagnostic package. Individual components represent effective and essential solutions to each of the demanding requirements of a Neuroscience facility.

The philosophy driving Neuvo development proves that a true system solution is greater than the sum of its parts.

The vision for Compumedics' Neuvo Long Term Monitoring (LTM) system is to be the world's foremost epilepsy monitoring system, suitable for and desired by the most recognized and prestigious institutions in the world.

It achieves this by combining forward thinking technologies from the realm of brain research into effective clinical tools to aid in patient management. Compumedics continues to develop these state-of-the-art techniques to lead the way for future innovative clinical approaches ensuring world's best-practice in the field of Clinical Neurology.

# neuvo<sup>1</sup>

The Ultimate LTM EEG System

Part of a family of  
Compumedics  
amplifiers that  
harmoniously integrate  
into the system for  
efficient workflow  
for enhanced  
productivity and  
accurate clinical outcomes.



A true integrated system that addresses enhanced operational and functional user needs:

- Installation
- Cabling management
- User interface

Neuvo exceeds the needs of even the most progressive Epilepsy Monitoring Unit (EMU).

By blending the traditional lines of research and clinical systems, Compumedics has designed solutions that meet exacting demand requirements from long term monitoring to routine diagnostic procedures. With features like our new ergonomic cart design enhancing technologist access and convenience, practically no cable clutter, extreme specification research, capable amplifiers, comprehensive EEG analysis available on the physician's desktop and secure data archival count on Neuvo, count on Compumedics!



# Solutions for your every EEG need...

## The Ultimate Long-term EEG Monitoring System

When the Epilepsy Monitoring Unit demands performance, **Neuvo** delivers. Built on the technology platform of the leading amplifier technology in the brain research world, **Neuvo** is capable of high density, high speed recording with all channels sampled simultaneously, eliminating sample-and-hold circuitry for superior data quality. Combine the outstanding ergonomics of **Neuvo** with the power of **ProFusion neXus** and you have a fully networked solution for your facility. We also introduce several innovations to address wire clutter including - “**One-cable**” connectivity to the control room and “**Zero-Cable-Clutter**” systems.





Wall Configuration

### **LCD Display**

- Unique Integrated LCD Display and Control Panel
- Bedside patient information for centralised operation at your fingertips
- Convenient calibrations and impedance checking in the room

### **Zero-Clutter Cable Management System**

Another innovation from Compumedics that neatly hides the unsightly clutter and potential hazard of cables for increased patient comfort and safety. Simplified setup and looks great.

### **Passive Headbox**

- 64-channel light-weight and compact patient worn passive jack box
- 32-Channel version for use with e-series 32/64 System

### **SynAmps2 Clinical Amplifier**

- Ultimate amplifier technology platform for brain research
- High speed amplifier sampling up to 10,000Hz all channels
- High channel counts up to 256 channels
- True DC amplifier (bandwidth DC to 3500Hz)
- No stimulus artifact
- Superior quality EEG with our "Active Noise Cancellation" technology
- Grid and surface recordings
- 64 referential EEG inputs per amplifier
- 4 bi-polar inputs per amplifier
- Up to 4 amplifiers per system unit

**Neuvo components also function perfectly with our SynAmps2 'Research' Amplifier (available for evaluation of high frequency and high sampling rates data up to 20,000Hz). Use with Neuvo software for ERP.**

### **Fully integrated digital monitoring system Control Box**

Centralised system display and control unit allows connections for Strobe, Event Button, Camera, Microphone and other external devices.

# Fully Integrated Laboratory Management Software



**Combine the outstanding ergonomics of Neuvo with the power of ProFusion nexUS and you have a fully networked solution for your facility!**

ProFusion nexUS is a Laboratory Management system created to optimize efficient workflow in busy diagnostic or research laboratories. ProFusion nexUS allows the laboratory to operate efficiently and manage resources more easily.

ProFusion nexUS is extremely flexible and securely manages and helps control data in any study setting. Whatever your requirements, from a 2 bed fixed-site lab, multi-site labs connected via network or a mobile service with remote sites, you'll benefit from the impressive capabilities and efficiency offered by ProFusion nexUS.

Compumedics understands the need for demographic information. ProFusion nexUS allows identification of "all" patients recorded: their current and past EEGs, normal and abnormal findings. ProFusion nexUS also allows the use of checkmark fields and drop down menus for reporting from the routine lab, ambulatory, and Epilepsy monitoring to unite results.

- Advanced engineering approach to data management of extremely large datasets from recordings with high sampling rates and multiple gigabytes record sizes
- Full work flow management
- Automatic archiving
- Patient management services
- Advanced Report Writer module
- Network access of all data and video





## Customized Mobile Solution

The Neuvo Trolley is designed for maximum mobility and versatile configuration without compromise in functionality. Neuvo's cart is ergonomically designed to easily accommodate any user in a compact, stable and robust package.

## Software Highlights

**Record non-stop for up to 45 days at high sample rates and high channel densities**

**Full editing suite available for online studies**

Review, crop, re-montage and edit studies while recording.

**Multiple independent video windows**

Open multiple video windows on a patient with independent digital pan and zoom.

**Real-time advanced montaging**

View the effects of changing montages immediately on the EEG display.

**On-the-fly electrode assignment**

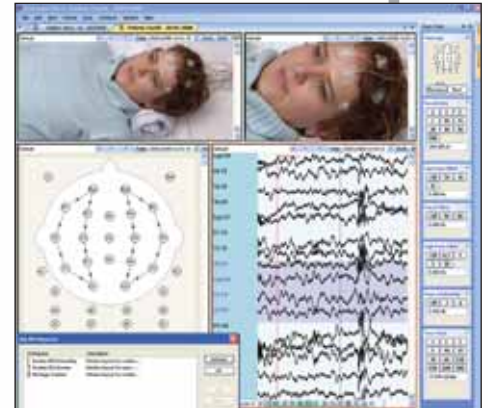
Easily reassign new amplifier channels and continue without touching the montage.

**Seizure detection and audible alerts**

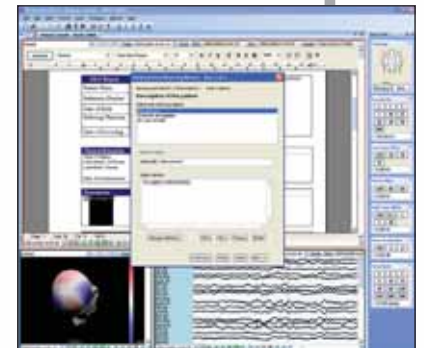
**Advanced reporting engine**

Instantly generate reports from templates created in Microsoft Word, Wordpad or ProFusion EEG 4. Define customized reporting fields for subjective patient data.

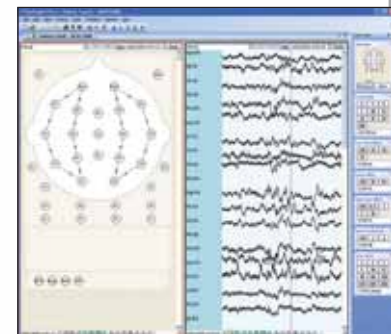
(Software backward compatible with ProFusion EEG).



Multiple independent video windows



Advanced reporting engine



Real-time advanced montaging

# More Options for your LTM Laboratory

Compumedics offers other options to seamlessly expand capabilities in the epilepsy monitoring unit.

## Wireless Ambulatory



- > **Wireless Siesta802**  
Wireless Ambulatory recorder
  - Provide your patients with the latest in wireless monitoring
  - Wireless on the 802.11b protocols
  - True 16 bit resolution
  - Battery operated and lightweight
  - 32 configurable channels of data acquisition
  - Record realtime via wireless 802link to PC or set it up as an Ambulatory device recording to compact flash card, or both.

## Ambulatory



- > **Safiro**  
Ambulatory EEG/PSG  
32 channels ambulatory EEG recording for 24 hours plus.

## Full Sleep Support



All amplifiers from Compumedics come with full sleep support.

## Research Support



- > **SynAmps2 Research**  
The Ultimate Amplifier  
Neuroscan SynAmps2 - the ultimate amplifier technology - for research and clinical applications.



- > **CURRY**  
Multi-Modal Neuroimaging Software  
Maximum accuracy of EEG Source reconstruction and visualization is now achievable through an intuitive Windows® user interface. CURRY integrates functional and image modalities into a single software package that allows EEG Source reconstruction and 3-D visualization.
  - Cryosurgical evaluation of cortex
  - Evaluation of intracranial EEG
  - Brain Imaging
  - Spike ripples.



- > **SCAN**  
Platform for EEG Acquisition and Functional Neuroimaging  
SCAN 4.5 continues the tradition as the worlds leading software package for electrophysiological research.



- > **STIM**  
Accurate timing of visual and auditory stimulation in Windows XP  
STIM 2 is a complete integration and improvement of our popular package for paradigm generation and presentation for EEG, MEG, fMRI and other Neuroimaging modalities.



- > **QuikCap**  
Electrode application system  
QuikCap technology is an electrode application system designed to speed testing preparation, ease clean up and provide quality consistent results from beginner to expert. 128 channel shown, available in various channel counts and also for sleep applications.



Since 1987, Compumedics Limited has emerged as a world leader in the design, manufacture, and sales of diagnostic sleep, neurophysiology, research and transcranial Doppler systems. Compumedics' design expertise in the area of portable recorders and wireless data transmission is just one reason for our continued double digit growth in the USA year after year. Compumedics is improving people's lives through products, exceptional service and a full range of consumables and accessories brought to you by dedicated people who care.

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