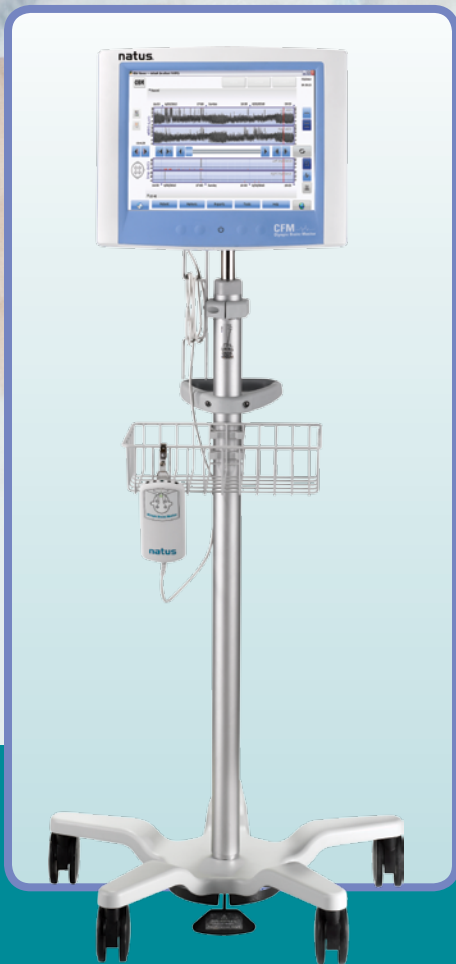


CFM

Olympic Brainz Monitor

Continuous Bedside Cerebral Function

*Monitoring provides actionable
information when you need it most...*



*The **Olympic Brainz Monitor** is the latest technology in cerebral function monitoring (CFM), allowing you to begin monitoring in 3 easy steps: Plug in unit, apply electrodes and start recording.*

natus[®]
pediatrics

Understanding an infant's brain health is a critical part of your treatment decisions. Use of continuous Cerebral Function Monitoring provides vital information to clinicians to assist with earlier diagnosis and treatment¹ — the **Olympic Brainz Monitor** is the optimal CFM solution for fast & simple routine bedside monitoring.

CFM

Olympic Brainz Monitor

The Olympic Brainz Monitor provides aEEG (amplitude integrated EEG), real time EEG and continuous measurement of impedance in 1, 2, and up to 3 channel configurations. The kiosk style interface allows real time monitoring of brain function, providing vital data that may assist in predicting outcomes.

Clinical Usage of aEEG Monitoring

Medical literature reports that aEEG monitoring can be used to:

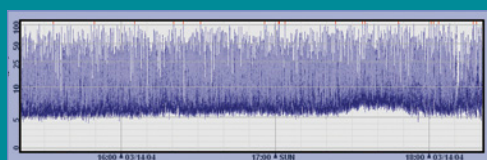
- Monitor general neurological status
- Monitor and record frequency and intensity of seizures to assist in the management of medical therapy
- Monitor during hypothermic treatment to measure the effectiveness of treatment²
 - ♦ The time to normal trace (TTNT) has prognostic value and is a good predictor of neurodevelopment outcome in term infants with Hypoxic-Ischemic Encephalopathy (HIE) undergoing hypothermic treatment³
- Monitor aEEG patterns to indicate the presence of sleep wake cycling in preterm infants, which is associated with better outcomes in HIE patients⁴ and may add value in developmental care

Ease of Operation

- System based *Online Help* feature provides a step-by-step guide for setting up both the system and patient prep — allowing staff to start monitoring in minutes
- Intuitive navigation allows access to information fast when you need it most
- Versatile Patient Settings
 - ♦ Easily add a channel to an existing single channel setup
 - ♦ Cross cerebral, right and left hemisphere and up to 3-channel monitoring simplifies patient hook up and provides additional data when needed



Trace appears normal without CFMsight



Same trace with CFMsight clearly shows a burst suppression pattern

CFMsight™

Provides enhanced signal display for easier trace interpretation

¹Utility of prolonged bedside amplitude-integrated encephalogram in encephalopathic infants. Mathur AM, Morris LD, Tete F, Inder TE, Zempel J. *Am J Perinatol.* 2008 Nov;25(10):611-5. Epub 2008 Oct 7.

²Atlas of amplitude integrated EEGs in the Newborn, 2nd Edition. Lena Hellström-Westas (Author), Ingmar Rosen (Author), Linda S. de Vries (Author) (P.81 and p.82).

³Sleep-Wake Cycling on Amplitude-Integrated Electroencephalography in Term Newborns With Hypoxic-Ischemic Encephalopathy. Damjan Osredkar, MD*, Mona C. Toet, MD*, Linda G. M. van Rooij, MD*, Alexander C. van Huffelen, MD, PhD, Floris Groenendaal, MD, PhD*, Linda S. de Vries, MD, PhD* *PEDIATRICS* Vol. 115 No. 2 February 2005, pp. 327-332.

⁴NeoReviews. Hellstrom-Westas, Rosen, deVries, Greisen. Vol 7 No. 2 February 2006

Monitor neurological status sooner — help the newborn faster

Ease of Interpretation & Collaboration

CFM Viewer

- CFM Viewer software implements similar functionality to the bedside unit, permitting review & analysis of recorded CFM data on a personal computer
- Remote Consult & Review — offers remote viewing of active recordings from any location
 - ♦ Allows remote consultation
 - ♦ Provides remote review and annotation of patient recordings with marked events appearing at bedside
- Viewer runs on Windows® XP SP2+, Windows® Vista and Windows® 7

Event Markers

- User-customizable, time-stamped markers keep track of medications administered, making the review process more efficient and easier for cross collaboration
- Different colors designate whether markers were placed at bedside or using Viewer from a remote location

File Management & Printing Options

- Network archiving feature allows transfer of sessions and facilitates file management by increasing speed of transfer
- Network printer connectivity simplifies charting and record keeping, saving cost by allowing printing onto standard paper
- Archive, restore and review patient files via USB, allowing data management even when not connected to the hospital network



ACCESSORIES

CART

- The bedside unit mounts to a cart – for placement in close proximity to the patient's bedside

ELECTRODES

- Both Hydrogel and Needle electrodes are supported through standard touch-proof connectors located on the amplifier housing

ORDERING INFORMATION

| Description | Catalog# |
|--|----------|
| Olympic Brainz Monitor Kit - NA (Includes: Monitor, roll stand, starter kit, power cord, DAB and hard copy manuals)..... | OBM70001 |
| Olympic Brainz Monitor Kit - EU (Includes: Monitor, roll stand, starter kit, power cord, DAB) | OBM70002 |
| Olympic Brainz Monitor Kit - UK (Includes: Monitor, roll stand, starter kit, power cord, DAB) | OBM70003 |
| Olympic Brainz Monitor Kit - NZ/AUS (Includes: Monitor, roll stand, starter kit, power cord, DAB) | OBM70004 |

Consumables

| | |
|---|----------|
| Neonatal Sensors – 12 sets (1 set = 5 sensors) in a re-sealable pouch..... | OBM00042 |
| Low Impedance needle electrodes - 6 sets (1 set = 4 needles)..... | OBM00046 |
| Wrap Hats (pack of 10 w/ dots)..... | OBM00043 |
| Skin Markers (box of 10)..... | OBM00044 |
| NuPrep Skin Preparation Gel - 4oz Tubes (3-pk)..... | 102566N |
| Positioning Strips - Term and Pre-Term, pack of 20 (10 of each)..... | OBM00047 |



GENERAL SPECIFICATIONS

TOUCH SCREEN MONITOR:

| | |
|------------|---|
| Weight | 14.33 lbs (10 kg) |
| Dimensions | 16.46 x 13.46 x 4.53 in (418 x 342 x 115 mm) |

DATA ACQUISITION BOX (DAB):

| | |
|------------|---|
| Weight | 10 oz (280 g) |
| Dimensions | 2.98 x 5.75 x 1.23 in (75.7 x 146.1 x 31.2 mm) |

ROLL STAND:

| | |
|------------|---|
| Weight | 40 lbs (20 kg) |
| Dimensions | 61.5 in height, 25 in base dia. (1562 mm height, 635 mm base dia.) |

OPERATION (all components)

| | |
|-------------------|-------------------------------------|
| Temperature | 0 to 40 °C (32 to 104 °F) |
| Relative humidity | 25 to 90% at 40 °C (non-condensing) |

Display

Real-time EEG Waveform
Rapid pens (aEEG, Impedance) - Computed
Rapid numeric (Impedance) - Computed
Histogram distribution over 15-second intervals (aEEG, Impedance)
Color TFT LCD with resistive touchscreen, 15" (381 mm) diagonal, TFT color, 1024 x 768 pixel native resolution

POWER SUPPLY (integrated)

| | |
|--------------------------------|--|
| Power supply unit | Integrated AC, medical grade |
| Power supply input voltage | 100 - 240 VAC, 50/60 Hz, 4A - 2A |
| EEG specifications Sensitivity | 50 μ Vpk full scale maximum sensitivity ($< 1 \mu$ V/mm) |
| Dynamic Range | 0.30 - 10000 μ Vpp (1-20 Hz) |
| Update Rate | 200 Hz (EEG Waveform) |

DATA ACQUISITION BOX (DAB) SPECIFICATIONS:

| | |
|-------------------------------|----------------------------|
| Differential channels | 3 |
| Frequency response | 0.5 Hz ~ 450 Hz |
| Analogue to digital converter | SAR ADC (16x oversampling) |
| Sampling rate | 2000 Hz |
| Resolution | 16 bits |
| Sampling quantization | 300 nV |
| Input impedance (DC) | $> 50 \Omega$ |

natus
pediatrics

Natus Medical Incorporated
1501 Industrial Road • San Carlos, CA 94070 USA
1-800-303-0306 (US/CA) • Worldwide: +1-650-802-0400
www.natus.com



DOC-003875B