

# NIRSIT

Brain Imaging System



## Portable High-resolution fNIRS device, NIRSIT!

OBELAB is introducing a new Near-Infrared Spectroscopy (fNIRS) system called NIRSIT! This easy-to-use wearable system is specially designed to measure the hemodynamic response in the prefrontal cortex region.

## Key Features

- Safe optical measurement with no radiation
- Easy wired and wireless connections
- Ergonomically designed to fit different head sizes comfortably
- Made of safe medical-grade silicon (no skin irritation)
- Real-time monitoring of Oxy and Deoxy hemoglobin concentration changes
- Provides the most channels among frontal lobe measurement fNIRS Supports multi-distance measurement of 204 channels (regular is 48 channels)
- Synchronization with E-Prime, PsychoPy, and Psychtoolbox (event markers)
- Supports CSV format for instant data export
- The easy-to-use proprietary analysis tool (also supports data export for open-source tools like Homer and NIRS-SPM)
- Simultaneous tracking of head motion using a 6-axis motion sensor

## Application Areas



Cognitive Function



Psychiatric Disease



Neuro-Marketing



Neurological Disorder

# NIRSIT

Brain Imaging System



advanced  
**MEDICAL**  
equipment ltd

Unit 4, Foundry Court, Foundry Lane  
Horsham, West Sussex, RH13 5PY, U.K.

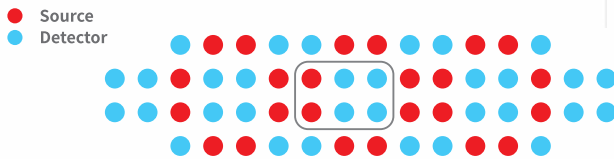
Tel: +44 (0) 1403 260156

Fax: +44 (0) 1403 260175

E-mail: [info@advancedmedicalequipment.com](mailto:info@advancedmedicalequipment.com)

Web: [www.advancedmedicalequipment.com](http://www.advancedmedicalequipment.com)

## Channel Arrangement



## Technical Specifications

|                            |  |
|----------------------------|--|
| Optode distance            | Regular 3 cm (Multi distance 1.5cm, 2.12cm, 3.35cm)                                  |
| Number of channels         | 48 channels (Max 204 channels)   |
| Number of Optical Elements | Source : 24<br>Detector : 32   |
| Wavelength                 | 780nm, 850nm   |
| Weight                     | 550g (without strap (20g))   |
| Sampling rate              | 8.138 Hz (about 8 samples / sec)   |
| Motion sensor              | 6-axis   |
| Operating time             | 8 hours (3000mAh rechargeable battery)   |
| Communication Protocol     | Wireless : WLAN 2.4GHz IEEE 802.11b/g/n<br>Wireline Serial Communication (Micro USB) |
| Recommended PC spec.       | > Window 10, > RAM 8GB, SSD  |
| Warranty                   | 1 Year   |



## Accessories

|        |   |
|--------|---|
| NIRSIT | Tablet, USB cable, OTG connector, Charger, Silicon Cap, Strap, Disposable Patch, USB (Manual, SW installer) |
|--------|---|



[www.obelab.com](http://www.obelab.com)

12F Vision Tower, 312, Teheran-ro, Gangnam-gu, Seoul, 06211, Korea

TEL +82-2-6407-3889 FAX +82-2-6407-4967 E-mail [contact@obelab.com](mailto:contact@obelab.com)

**OBELAB**