

# NIRSIT LITE KIDS

Brain Imaging System



## NIRSIT Lite for Research on Kids

OBELAB introduces a new Near-Infrared Spectroscopy (fNIRS) system called NIRSIT Lite! This ultra-lightweight and easy-to-use wearable system is specially designed to measure hemodynamic responses in the prefrontal cortex region.

### Key Features

- Ultra lightweight and wearable
- Safe optical measurement with no radiation
- Seamless wireless connection via BLE(Bluetooth Low Energy) connector
- Ergonomically designed to fit different head sizes comfortably
- Made of safe medical-grade silicon with no skin irritation
- Real-time monitoring of Oxy and Deoxy hemoglobin concentration changes
- 15 standard channels and 2 short separation 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 9-axis motion sensor

### Application Areas



Brain development



Neurofeedback



Meditation



VR research

# NIRSIT LITE **KIDS**

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**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)

## Technical Specifications

Optode distance	Regular 2.5 cm
Number of channels	15 channels (regular) 4 channels (0.8cm, 1.6cm)
Number of Optical Elements	Source : 5 Detector : 7 (regular) 6 (additional)
Wavelength	780nm, 850nm
Weight	163g (without strap (20g))
Sampling rate	8.138 Hz ( about 8 samples / sec)
Motion sensor	9-axis
Operating time	5 hours (1000mAh rechargeable battery)
Wireless comm	BLE (Bluetooth Low Energy 5.0, 2.4GHz)
Recommended PC spec.	> Window 10, > RAM 8GB, SSD
Warranty	1 Year



## Accessories

NIRSIT Lite	BLE Dongle, USB cable, Charger, Manual, Warranty Certificate, Disposable Patch (additional)
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[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)

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