

### **NIRSIT Lite for Research**

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**



# **NIRSIT LITE**

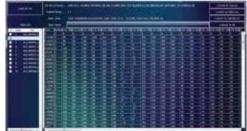
**Brain Imaging System** 



# **Technical Specifications**

Optode distance	Regular 3 cm
Number of channels	15 channels (regular) 4 channels (0.8cm, 1.9cm)
Number of Optical Elements	Source: 5 Detector: 7 (regular) 6 (additional)
Wavelength	780nm, 850nm
Weight	172g (without strap (20g))
Sampling rate	8.138 Hz ( about 8 samples / sec)
Motion sensor	9-axis
Operating time	5 hours (1000mAh rechargable 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

 ${\tt BLE\ Dongle, USB\ cable, Charger, Manual, Warranty\ Certificate, Disposable\ Patch\ (additional)}$ 



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

