

Brain Activity Monitor Device Hb133

Low-priced version!
Better fit with the stretchy bandana!

Ultra-light weight (100 g)
2 channels on frontal lobe
rSO₂ (%), Oxy-Hb (mM), Deoxy-Hb (mM)
Acceleration (X, Y, Z)



Display screen image of the measurement program

- Sensor: 2 channels
- Weight: 100 g (Ultra-light weight)
- Astem original stretchy bandana (made in Japan)
- Measurement items: Regional Oxygen Saturation (rSO₂: %), Oxyhemoglobin (Oxy-Hb: mM), Deoxyhemoglobin (Deoxy-Hb: mM), Acceleration (X, Y, Z), max. 2G
- Bluetooth-LE (MBN52832)
- Sampling rate: Max. 10 Hz (0.1 sec)
- Measurement display program: Windows

Hb13 Series Brain-NIRS System

Specifications

Model	Hb133
Measurement technology	NIRS (Near-infrared Spectroscopy), SRS (Spatially-Resolved Spectroscopy)
Light source	2 colors of LEDs Average power: 1 mW or less Peak wavelength: 770±10 nm, 830±10 nm
Light detectors	Photodiodes
Sensor board	FPC (Flexible Printed Circuits) NOTE: Inappropriate handling may damage the circuits.
Number of channels	2 channels (fixed)
Output data format	CSV format
Sampling rate	0.1, 0.2, 0.5, 1.0 (sec)
Measurement items	Regional Oxygen Saturation (rSO ₂ : %) Oxyhemoglobin (Oxy-Hb: mM) Deoxyhemoglobin (Deoxy-Hb: mM) Triaxial acceleration (X, Y, Z, max. 2G)
Power source	2 AAA batteries, 3V The faster the sampling rate is, the faster the battery will be eaten up.
Wireless connection	Bluetooth-LE (MBN52832) Within 5 m Foreign certificates: CE (Europe), FCC (US), IC (Canada), KC (Korea)
Flash memory capacity	128 KB (in storage mode)
Measurement program	Windows Hb133.exe
Supported OS	Windows 8.1, 10
Accessories	Bandana (2 sizes: L/M and M/S), SD card
Weight	Approx. 100 g (including batteries)
Included software	NIRS Data Analysis program



Product name	Model
Brain Activity Monitor*	Hb133
Bandana (2 sizes: L/M, M/S)	Hb-b

- In a bright environment, it may not be possible to measure correctly due to the influence of external light.
- Attach the sensor firmly to the skin. Hair between the sensor and skin interferes the measurement.
- Bandanas are available in two sizes.
- The program and other information will be provided with SD card.



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NOTES

- This device cannot be used for medical treatment. If you wish to use it, please obtain approval from the ethics committee of the university or hospital.
- You can use this product to develop and sell the application. We will provide the necessary information free of charge, so please feel free to contact us.
- The light measurement and correction algorithms for this product are based on technology owned by Shizuoka University and implemented by us under an exclusive license.

Manufacturer/Distributor

Controlled medical devices marketing licenss holder
Highly controlled medical devices marketing license holder
rental business

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