Hb13 Series Brain-NIRS System

Brain Activity Monitor Hb134

- 2 measurement modes:
- Real-time mode
- Storage mode
- Data processing and event data synchronizing function during the simultaneous measurement with several devices
- · Ultra-light weight (100 g)
- · 2 channels on frontal lobe
- Measurement items: 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 (rSO 2: %), Oxyhemoglobin (Oxy-Hb: mM), Deoxyhemoglobin (Deoxy-Hb: mM), Acceleration (X, Y, Z), max. 2G
- · Sampling rate: Max. 10 Hz (0.1 sec)
- Measurement display program: Windows



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Specifications

Model	Hb134
Measurement	NIRS (Near-infrared Spectroscopy), SRS (Spatially-Resolved
technology	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. Measured data will be saved in the flash memory of the
	main unit during the storage mode measurement.
Sampling rate	0.1, 0.2, 0.5, 1.0 (sec)
Measurement items	Regional Oxygen Saturation (rSO ₂ : %)
	Oxyhemoglobin (OxyHb: mM)
	Deoxyhemoglobin (DeoxyHb: 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)
Flash memory capacity	128 KB (in storage mode)
Measurement program	Windows Hb134.exe
Event file	Depends on the calendar of the host device. Data storing capacity
	for 6 months.
Supported OS	Windows 8.1, Windows 10
Accessories	Bandana (2 sizes: L/M and M/S), SD card
Weight	Approx. 100 g (including batteries)
Event function	Event data synchronizing after the measurement.



Product name	Model
Brain Activity Monitor*	Hb134
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.

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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