

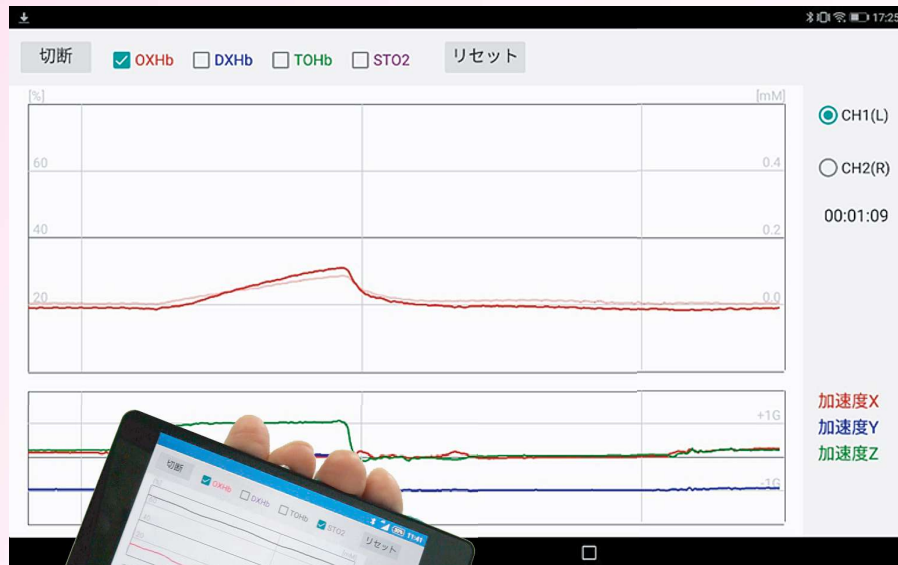
Brain Activity Monitor Hb134

2 measurement modes:

- Real-time mode
- Storage mode (only for Windows)

Data processing and event data synchronize function during simultaneous measurement,
Ultra light weight (100 g), 2 channels on frontal lobe, ...
rSO2 (%), Oxy, Deoxy-Hb (mM)
Accelerometer (X, Y, Z)

monitoring screen on the tablet / Smartphone (android)



- LED sensor : 2 channels (fixed)
- Weight : 100g (Extremely light weighted)
- Bandana : stretch fabrication, ASTEM original (made in Japan)
- Measurable items (each channel)
 - oxygen saturation (rSO2: %), oxy-Hb, deoxy-Hb (mM)
- Acceleration sensor (X, Y, Z) max=2G
- Wireless device : Bluetooth-LE (MBN52832)
- Sampling rate : Max 1 OHZ (0.1sec)
- Operating System for measurement view : Windows and android

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Technologies for Wellness and Happiness

Hb13 Series Brain-NIRS System Wearable brain blood visualization device

Specifications

Product Type	Hb134
Measurement Method	NIRS(Near-Infrared Spectroscopy) Specially-Resolved Spectroscopy(SRS) Method
Light Source	2 Color LEDs peak wave length : 770 +/-10nm and 830 +/-10nm average power : ~1mW /LED
Light Reception	Photo Diodes
Sensor Board	Flexible printed circuits(FPC) Warning: repeated bending breaks circuit
Number of Cannels	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.
Sampling Rate	0.1 / 0.2 / 0.5 / 1.0 second
Measurement Items	Regional Saturated Oxygen (rSO2:%) Change value (mM/L) - Oxygenated hemoglobin(Oxy-Hb) , - Deoxygenated hemoglobin(Deoxy-Hb) 3-axis acceleration (max:2G)
Power Supply	2 AA A dry batteries (1.5V * 2)
Wireless Connection	Bluetooth-LE(MBN52832) Range Distance : 5m or less Oversea Certifications CE for Europe, FCC for US, IC for Canada
Measurement program	For windows : Hb134.exe For Android : Hb134.apk
Available OS	Windows : Windows 8.1, Windows 10 Android : Android 5.0 or higher
Weight	approx. 100g including 2 AAA dry batteries
Event function	Event data synchronize after the measurement.



Product Name	Product Code	Price(JPY) tax is included
Brain Activity Monitor *)	Hb134	253,000
Bandanas(L, M or M, S)	Hb-B	4,400

- In bright environments, it may not be possible to measure due to the influence of external light.
- The intervenes of a hair between a device and skin may disturb the measurement.
- Bandana size : M/L for men, M/S for women(Color : black only).
- Bandana is consumable goods, and can be ordered separately as a spare.
- All applications and programs are saved in the enclosed SD card.



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Important Matter

- The device may not be used for medical purposes.
Approval by an ethics committee is required for medical use.
- The development and sales of software connecting our devices can be possible when contact us beforehand.
necessary information can be provided with no charge.
- The optical measuring and correction algorithm of this product is carried out by Astem Co., LTD. under the exclusive license of Shizuoka University owned technology.

Manufacturer/Distributor

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

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