

Brain Activity Monitor Device Hb131

Ultra-light weight wearable NIRS

Instant data transmission to the display terminal

Features

- Ultra-light weight sun-visor type (110 g)
- Astem original sun-visor with stretchy fabric (made in Japan)
2 sizes (L/M, M/S, optional size S for kids)
- Measurement of blood volume status on skin of scalp and cerebral cortex
- Real-time trend graph
- Better battery duration with energy efficiency
- Low-priced model



Hb131S



Specifications

- 4 channels (fixed)
- Measurement items (for each channel)
Skin of scalp: Oxyhemoglobin, Deoxyhemoglobin
Cerebral cortex: Oxyhemoglobin, Deoxyhemoglobin, Regional Oxygen Saturation (rSO₂: %)
- Acceleration (X, Y, Z)
- Zigbee protocol for wireless connection
- 2 AAA batteries
- Measurement display program (Windows)

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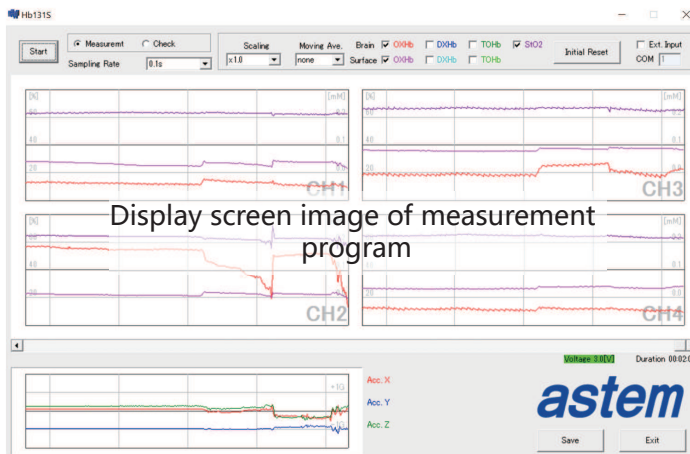
Technologies for Wellness and Happiness

Hb13 Series Brain-NIRS System

Specifications

Model	Hb131S (Sun-visor type)
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)
Number of channels	4 channels (fixed)
Output data format	CSV format
Sampling rate	0.1, 0.2, 0.5, 1.0 (sec)
Measurement items (Cerebral cortex)	Regional Oxygen Saturation (rSO ₂ : %) Oxyhemoglobin (Oxy-Hb: mM) Deoxyhemoglobin (Deoxy-Hb: mM) Total hemoglobin (T-Hb)
Measurement items (Skin of scalp)	Oxyhemoglobin (Oxy-Hb: mM) Deoxyhemoglobin (Deoxy-Hb: mM) Total hemoglobin (T-Hb)
Acceleration	X, Y, Z (max. 2 G)
Battery	2 AAA batteries, 3V (battery life may depend on the sampling rate)
Wireless connection	Zigbee protocol IEEE802.15.4 Foreign certificates: Japan, Taiwan, EU, US, Canada etc.

- 2 sized sun-visors included (L/M, M/S, black color only). Optional size S (for kids) is available.
- Additional sun-visors are separately available.
- Measurement display program and other instruction materials will be provided with USB memory.



The radio band used by this device is the one used by microwave ovens, microwave surgical knives and Bluetooth. There is a possibility of data loss if there is interference.

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 license holder
Highly controlled medical devices marketing license holder rental business

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