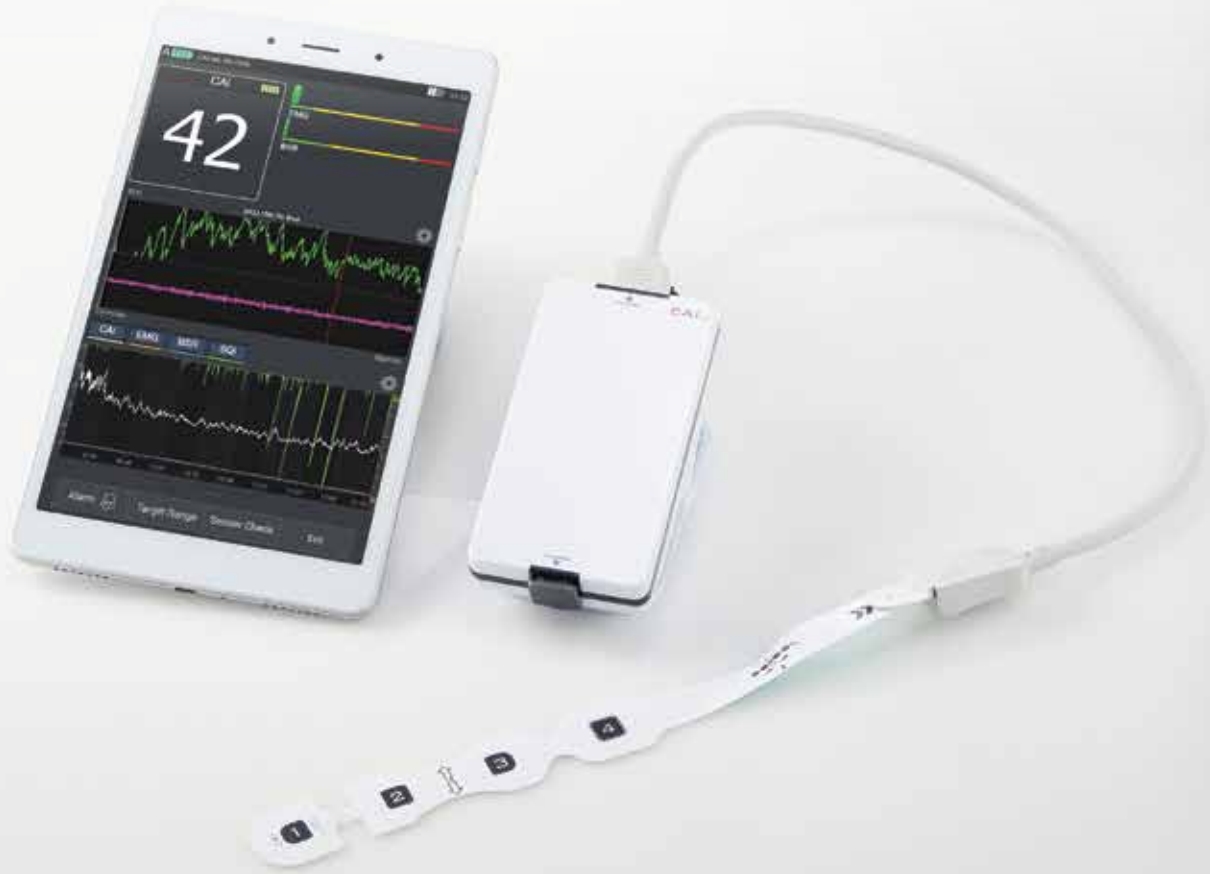
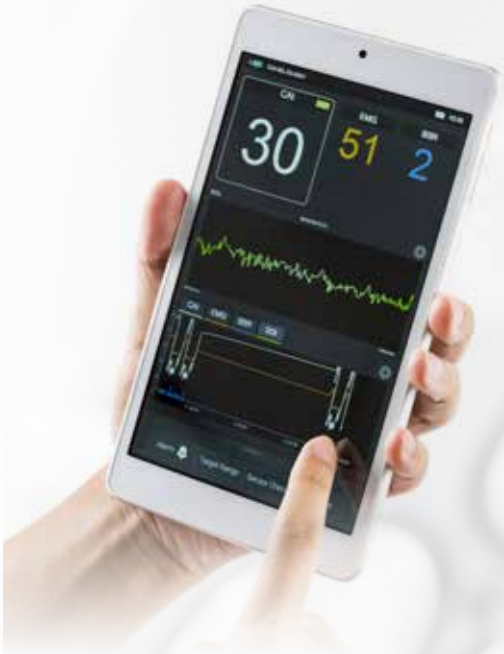
CAI Monitoring System
for Depth of Anesthesia



- Monitor the Depth of Anesthesia in real time for all stage of anesthesia
- A.I algorithm improves accuracy of CAI index
- Bluetooth connection ensures better utilization in the operating room
- Hydrogel sensor makes lower skin trouble and better adhesion
- UI can be customized on user's need

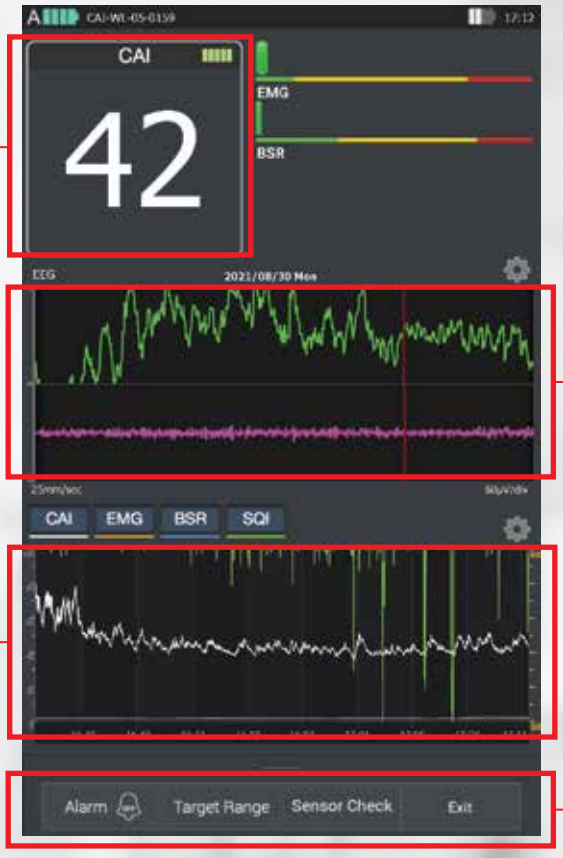
BrainU



CAI and Anesthesia

Any anesthetic faces two challenges; under dosage and over dosage. The CAI system processes the brain's electrical activity based on original signal processing technology. You can safely monitor the live depth of anesthesia anywhere and anytime in an operating room.

Main Screen



CAI index shows DoA undergoing anesthesia

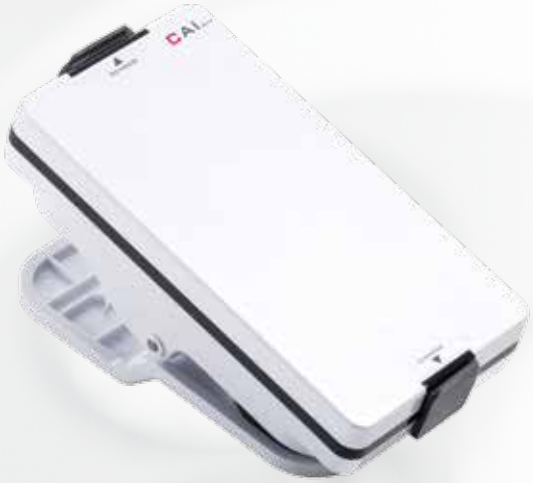
RAW EEG and EMG waveform show in real time

Index trend displays change of CAI index value over time

Frequently used functions can be configured in Manu bar

CAIx (Amplifier)

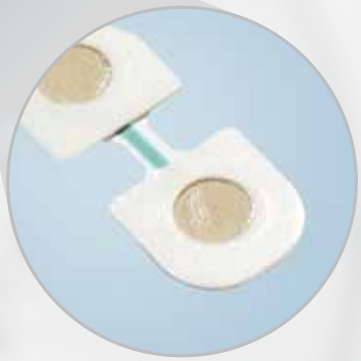
Compact size amplifier can be used anywhere and anytime.
Bluetooth connection between CAIx and tablet has increased space utilization in the operating room.



CAIs (Sensor)

front

back



Small-size sensor can be applied on both adult and child

Bio compatible hydrogel for the electrodes

- Less skin trouble
- Better adhesion to the skin

Specification

	Parameter	Specification
CAIx (Amplifier)	Demension	111mm x 60mm x 57mm
	Weight	160g
	Battery life	40h
	Communication	Wireless(BT 3.0)
CAIs (Sensor)	Demension	260mm x 24mm x 1.3mm
	Weight	5g
	Packaging	25
	Shelf life	2 years

Reference

01	Yoon YG, Kim TH, Jeong DW, Park SH. Monitoring the depth of anesthesia from rat EEG using modified Shannon entropy analysis. Annu Int Conf IEEE Eng Med Biol Soc. 2011;2011:4386-9. doi: 10.1109/IEMBS.2011.6091088. PMID: 22255311.
02	Kim TH, Yoon YG, Uhm J, Jeong DW, Yoon SZ, Park SH. A cepstral analysis based method for quantifying the depth of anesthesia from human EEG. Annu Int Conf IEEE Eng Med Biol Soc. 2013;2013:5994-7. doi: 10.1109/EMBC.2013.6610918. PMID:24111105.
03	J. Park, J. Kim, S. Hong, K. M. Kim and H. Chang, "Implementation of real-time Depth of Anesthesia monitoring system using wireless data transfer," 2014 International Conference on Information and Communication Technology Convergence (ICTC), 2014, pp. 917-918, doi: 10.1109/ICTC.2014.6983332.
04	Huh H. "Research for quantifying the depth of anesthesia based on physiological signal model." Dissertation Korea University, 2017. Seoul
05	Huh H, Park SH, Yu JH, Hong J, Lee MJ, Cho JE, Lim CH, Lee HW, Kim JB, Yang KS, Yoon SZ. Quantifying the depth of anesthesia based on brain activity signal modeling. Medicine (Baltimore). 2020 Jan;99(5):e18441. doi:10.1097/MD.0000000000018441. PMID: 32000357; PMCID: PMC7004717.

CE 2265

For more information, please visit
http://www.brainu.co.kr/

Copyright © 2021 BrainU Co.,Ltd. All rights reserved.
CAI, BrainU, BrainU logo are trademarks of BrainU Co., LTD.

Email: support@brainu.co.kr | Tel: +82-31-707-1788 | Fax: +82-70-7500-5483
3F, 7, Yatap-ro 105beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea, 13506