

SPECIFICATIONS

DATA COLLECTION

A/D CONVERTING FUNCTION

Channel Numbers	Maximum 32 channels
Sampling Frequency	From 100 To 1,000[Hz] (A certain limitation for the sampling frequency depends on the CPU)
Recording Time	Maximum 1 Week (Depends on the free space of the hard disk)

DATA ANALYSIS

SCORING OF SLEEP STAGES

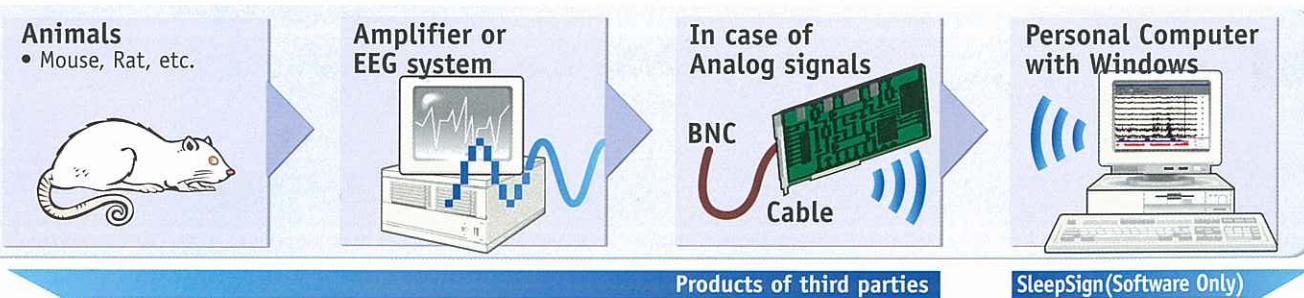
Sleep Stages	SleepSign™ has 3 unassigned stages except for regular preassigned sleep stages (Wake, REM, SWS, etc.).
Epoch length	4, 5, 8, 10, 12, 15, 20, 30, and 60 [second]
Minimum required signals	EEG:1ch, EMG:1ch, (Capabilities to include EOG signals)
Waveform Recognition	Delta-wave, Theta-wave, IEMG(Integrated EMG), (REMs Counts in EOG)
Method of Scoring	This software determines sleep stages by the condition divergence.

COMPUTER HARDWARE REQUIREMENTS

OS	Windows XP
CPU	PentiumII 400MHz or higher processor (600MHz or higher is recommended)
RAM	128MB or higher (256MB or higher is recommended)
Hard Disk	100MB or higher free space (1GB or higher is recommended)
Resolution	1024 x 768 or higher
Other	<p>A/D Converting Board</p> <p>CONTEC MICROELECTRONICS USA INC. AD16-16U (PCI) EV (16 chanel, 16bit, ±10V, ±5V) AD16-32/2(PCI) F (32 chanel, 16bit, ±10V, ±5V, ±2.5V) AD16-32/2(CB) F (32 chanel, 16bit, ±10V) (for laptop PC)</p> <p><Note> A signal connection cable need to be purchased separately</p> <p>Third party data import</p> <p>BioPac AcqKnowledge data file DSI Data Quest Art data file EDF (European Data Format) file Text file</p> <p>Printer</p> <p>Any printers work with the OS listed above.</p> <p>Expansion Storage Devices</p> <p>The use of a recording data storage is recommended. DVD-RAM, etc. (There is no limitation if it works with OS listed above.)</p>

ARCHITECTURE DIAGRAM OF SYSTEM

The whole recording system consists of the software, SleepSign™, and hardwares with an A/D conversion board and peripherals such as an amplifier.



Note: SleepSign™ is software only. (Personal computers and other pieces of hardware are not included.)

Developed by

KISSEI COMTEC Co., LTD. (JAPAN)

4010-10 Wada, Matsumoto, Nagano, Japan

Phone: +1-81-263-40-1122

Fax: +1-81-263-48-1284

Email: biosignal@comtec.kicnet.co.jp

URL: www.sleepsign.com

- The specifications and design of the products contained herein are subject to change without notice.
- Microsoft® Windows and Excel are the registered trademarks of Microsoft® Corporation.
- Other products names, system names and CPU names are generally (registered) trademarks of their manufacturers.

SLEEP ANALYSIS SOFTWARE

SleepSign™ for Animal

REVOLUTION FOR SLEEP ANALYSIS

COST EFFECTIVE!
LESS TIME CONSUMING!
USER FRIENDLY!

- SleepSign™ helps you to evaluate the different sleep stages of animals (rat, mouse, dog, etc.).
- SleepSign™ has 3 unassigned vigilance stages in addition to the regular pre-assigned sleep stages (Wake, REM, SWS, etc.). You can assign these vigilance stages as required in your research.
- SleepSign™ automatically evaluates sleep stages based on EEG and EMG signals. You can also easily evaluate sleep stages by visually checking the waveforms on the screen.
- SleepSign™ can display various types of information, such as Hypnograms and Trend Graphs.
- SleepSign™ has various analyzing functions, including Stage Graphs, Vigilance State Parameters Display, FFT analysis, digital filter, and zooming.

NOT FOR THE MEDICAL USE



KISSEI COMTEC Co., LTD.