

Technical Specifications

(Electroencephalograph Machine with Video for both children and adult)

Hardware

- **Computer system:**

Professional integrated high-speed computer, 4 core, 2.5GHz CPU, memory 2GB, hardware 500GB / (or higher performance)

- **Amplifier:**

Recording channel (for option): 8, 16, 22, 24, 33

Technical features:

Input impedance: 100MΩ

Input leakage current : < 7nA

Polarization voltage: ±550V

CMRR: > 105dB

A/D Conversion: 16bit

Sampling rate: 256, 512, 1024, 2048 HZ for option.

Muscle rejection: auto-measure and alarm.

Interface: USB、LAN for free option

- **Data process:**

LF: 0.05-530Hz, OFF, 20 gear in total for selection

HF: 15 -1000 Hz, OFF, 21 gear in total for selection

Sensitivity: 1-500, 15 gear for selection

Screen time (review speed): 2 types for selection: 0.5-8CM/S, 0.5-60 S/P, 20 gears in total for selection

Notch: 50 or 60 Hz (1/25 above decrements)

Reference channel selections: single polar、double polar、average polar (AV), regional average polar, source location reference (SD), System reference (REF)

Colors: 16 colors selectable for each channel

Video system:

Integrated camera

1. Digital video, MPEG-4 mode, adjustable record frame and picture, fast and convenient video edition.

Software features:

1. Simultaneous acquisitions and analysis of raw EEG data
2. Simultaneous acquisitions and review of video clip
3. Review and print in real time
4. Fractionated enlargement facility for accurate measurement of amplitude, time-interval and frequency
5. Quantitative EEG analysis software: amplitude and power spectrum, contents of EEG rate in each channel, left and right of the cerebral region comparing rate (differential ratio), maximum value
6. Facility to mark important events and auto-measurement in Analysis
7. 3 types of measurement: double cursor measurement, line measurement, enlargement measurement
8. Over 10 types of online trend lists for full channels: aEEG, burst interval, burst frequency, burst depression trend, power spectrum; band power trend; peak frequency trend; spectral edge; spectral ratio trend; envelope trend; **frequency and amount of sharp wave and spike wave; EEG complexity etc.**
9. Simultaneous acquisition of multiple bio-electricity signals, such as ECG, EMG, EOG, assistant for the judgment of sleep cycle
10. Extensive capability of bio-electricity signals, such as PR, BP, Temp, SpO2, PH value; ICP monitoring etc.
11. Alarm setup including voice and flash.
12. User definable comments for Doctors through hot keys
13. Web platform capable of remote monitoring for critical or coma patients.
14. Demonstration software, capable of data off-line analysis on any computers.
15. User-definable colors selectable for each part of the windows

