

POWERFUL SUPPORT TOOL
FOR BRAIN DIAGNOSTICS WORLDWIDE

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MIT SAR EEG

Electroencephalography System

It's a pleasure to help you with your scientific work and patient's healthcare needs

MIT SAR Co. Ltd.

Amplifiers Characteristics

Mitsar-EEG-201



- Portable and battery operated
- Impedance LED indicators on head box
- Safety USB connection

Technical features Mitsar-EEG-201 amplifier

Channels	21 EEG + 1 or 4 active/reference pair
Frequency band	0,16 - 70 Hz
Input impedance	> 200 MOhm
Noise	< 1,5 μ V peak to peak
Input range	5000 μ V peak to peak
Analog to digital conversion	16 bit ADC
Sampling rate	500 Hz/channel
Interface	USB
Power Supply	4 AA or rechargeable batteries
Dimensions	Head box: 185x135x45 mm
Weight	0.9 kg (with batteries)

Mitsar-EEG-202



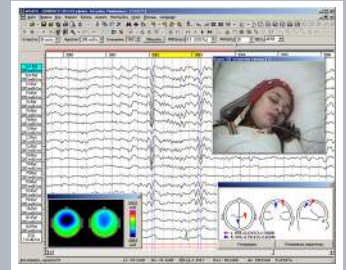
- Powerful tool for research facilities
- DC and AC modification
- Up to 8 poly channels

Technical features Mitsar-EEG-202 AC amplifier Mitsar-EEG-202 DC amplifier

Channels	24 EEG + 8 active/reference pair or 31 EEG + 1 active/reference pair	24 EEG + 8 active/reference pair or 31 EEG + 1 active/reference pair
Frequency band	0,16 - 150 Hz	DC - 150 Hz
Input impedance	Greater than 200 MOhm	Greater than 200 MOhm
Noise	< 1,5 μ V peak to peak	< 1,5 μ V peak to peak
Input range	100 mV	300 mV
Analog to digital conversion	24 bit	24 bit
Sampling rate	2000 Hz/channel	2000 Hz/channel
Storage rate	500 Hz/channel	500 Hz/channel
Interface	USB	USB
Power Supply	190-240V AC 50/60 Hz	190-240V AC 50/60 Hz
Dimensions	Head box: 185x135x45 mm Power supply unit: 120x50x30 mm	Head box: 185x135x45 mm Power supply unit: 120x50x30mm
Weight	Amplifier unit: 0.7 kg Power supply unit: 0.3 kg	Amplifier unit: 0.7 kg Power supply unit: 0.3 kg

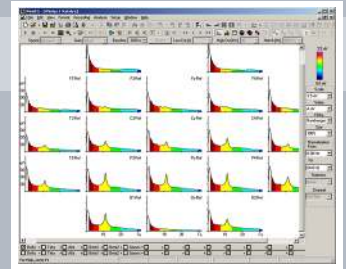
EEG acquisition and data processing

- Emulation of "moving" paper mode
- On-line chart moving speed, filter and sensitivity rescaling
- Rapid re-montaging and recovering to original recording parameters
- Event markers for quick identification
- Quick data scanning by markers and fragments
- EEG markers for frequency, duration and amplitude identification
- Variable speed for reviewing recording
- Default or customer frequency band range filtering
- Automatic artifacts search and rejection from future analysis
- Advanced artifact correction based on PCA or ICA decomposition of raw EEG



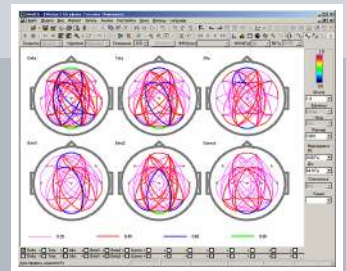
QEEG and ICA analysis

- Power spectra, coherence, bi-spectra and bi-coherence computation
- Mapping spectral parameters by band ranges
- Band ranges ratio and asymmetry maps
- EEG Independent Component Analysis (ICA)
- Comparison of analysis output



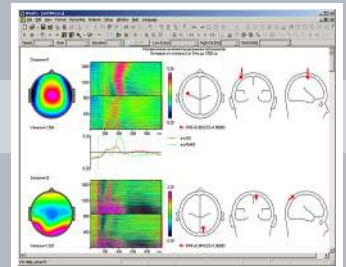
ERP acquisition and computation

- Visual and acoustic stimulus presentation
- Patient response recording using event button
- Event-related potentials (ERP's) computation
- Event-related De/Synchronization computation
- Wavelet band power and coherence computation
- Task performance (omission and commission errors, reaction time and its variance) calculation
- Mapping event-related dynamics parameters,
- Comparison of analysis output



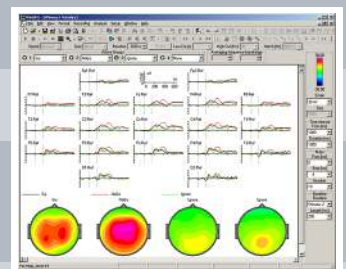
HBI reference database

- EEG spectra and ERP for healthy subjects with age from 7 to 89 years
- Includes 3 min of EEG recording in eyes open, eyes closed and 5 tasks: GO/NOGO, MMN, Mathematical, Reading and Acoustic task
- EEG spectra, coherence, ERPs and ERP independent components for the given patient could be compared with HBI database
- Automated Z-score estimation of statistical significance differences



Long-term Video-EEG

- Video and audio signal recoding
- On-line video and audio signal compression
- Free video-EEG recordings viewer



Built in patient-database of EEG observation and data processing results

Raw EEG, EEG spectra, EEG coherence, ERP and ERD export

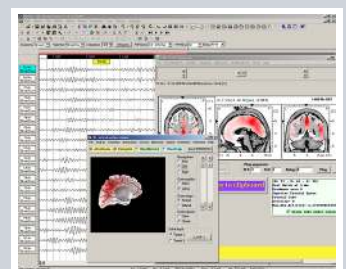
Raw EEG EDF plus format data import

Spectral density arrays trend graphs

Automated spike detection

Equivalent dipole source localization

3D equivalent source current density distribution by LORETA



EEG system kits

Mitsar-EEG premium system on mobile trolley

powerful tool for clinical application

What is included?

- Mitsar-EEG amplifier
- Amplifier tripod
- USB cable
- EEG electrodes set
- Mobile trolley
- Cable management and routing set
- Keyboard and mouse pull-out shelves
- Flat monitor VESA holder
- Isolation transformer
- WinEEG software for QEEG and ICA analysis

Mitsar-EEG portable system for outpatient investigations

solution for private doctors and research use with the best functionality/price ratio

What is included?

- Mitsar-EEG amplifier
- Portable amplifier tripod in soft cover
- USB cable
- EEG electrodes set
- WinEEG software for QEEG and ICA analysis
- Plastic carrying case

Additional options

- **Event-related potentials setup**
complete set for ERP recording and computation
- **Video EEG monitoring option**
up to 2 color video cameras video-EEG set for long-term day&night monitoring in epilepsy labs
- **Human Brain Indices reference database**
normative database of EEG spectra and ERP for subjects ages from 7 to 89 years
- **sLORETA biofeedback module**
complete set for 19 channel biofeedback training

Accessories

- EEG Ag/AgCl DIN electrodes
- EEG gel and Ten20 paste
- ElectroCap electrodes cap systems
- Red or/and white color LED photo stimulator
- Cables with ECG clips or for disposable electrodes
- EMG and EOG cap electrodes set
- Adult/Infant respiration sensor

Mitsar Co. Ltd.

Office Address

Politekhnikeskaya str, 6d, Saint-Petersburg,
Russian Federation, 194021

General Contact Information

Phone: +7 (812) 297-9013

Fax: +7 (812) 297-1733

E-Mail: export@mitsar.spb.ru

www: www.mitsar-medical.com