



progetti
Medical Equipment Solutions

EPG 12M PLUS

12 channels electrocardiograph



SD-CARD



BARCODE SCANNER



LAN PORT



USB PRINTER



U-DISK



KEYBOARD



- 10 inch TFT color display foldable 0-90°
- Large storage capacity up to 1000 exams
- Alpha-numeric keyboard with shortcut keys, efficient in operation
- Long lasting and rechargeable lithium battery
- Ergonomic design with built-in handle
- Data access with HIS/PACS/EMS system based on FTP/DICOM/HL7 standard protocol
- "Sleep / Wake-up" function for energy save and speedy start



ELECTROCARDIOGRAPH



EPG 12M PLUS

TECHNICAL SPECIFICATIONS



Main features

High resolution digital electrocardiograph capable of acquiring 12 channels ECG which are displayed and recorded simultaneously.
Automatic ECG acquisition with measurements and interpretation.
ECG waveform freeze and playback up to 300seconds.
Re-analysis mode: 10s of data acquired in automatic mode and print interpretation.
Timed sampling mode that starts recording once arrhythmia is detected.
Pacemaker detection settings.
Direct USB connection with external printer for A4 format printing.
Export data in PDF, JPG, BMP, XML, SCP, DICOM, FDA-XML format.

Technical features

Safety: IEC Class I Type CF.

Environmental: Operational temperature +5°C - +40°C, relative humidity ≤80%,

Transport / storage temperature -20°C / +55°C, relative humidity ≤95%

Atmospheric pressure 50 – 106 kPa.

Dimensions: 432x334x76mm mm.

Weight: 4.2 Kg including battery.

Power supply: AC 100 – 240V, 50/60 Hz, 0.17 – 0.4 A.

DC Rechargeable lithium battery, 14.4 V / 5200 mAh, working time 500 exams or 7 hours of continuous operation without printing.

Ergonomics: integrated carrying handle, foldable display 0° - 90°.

Keyboard: alphanumeric with function keys and shortcut commands to improve efficiency in routine operations.

Interface: standard USB, Master USB, LAN, SD-card.

Peripherals: USB, barcode reader, USB printer, keyboard, mouse, hard drive.

Display

Tipo: grafico e colori TFT LCD

Dimensione e risoluzione: 10", 800x480 pixels, 152x85mm

Aspetto: visualizza 12 tracce ECG contemporaneamente, modo funzionamento, dati paziente (nome/ID/età/sex), frequenza cardiaca, filtri, velocità/ampiezza ECG, memoria, messaggi allarme, data/ora, livello batteria, connessione periferica.

Messaggi: errore contatto singolo elettrodo, fine carta, batteria in esaurimento

Functional features

Leads system: Support Standard lead system, Posterior wall lead system, R-Pectoral lead system, R-pectoral/PW lead system, Up intercostal lead system, Down intercostal lead system, Cabrera lead system and User-defined lead name.

Defibrillation protection: device and cable protected against defibrillation.

Acquisition: simultaneously 12 leads, background grid

Intervallo: ±5mVpp, time constant ≥3.2s

Frequency response: 0.01-350 Hz

Input impedance: ≥50MΩ

Input circuit current: ±0.05μA

Polarization voltage: ±980 mV

CMRR: ≥100dB (AC filter off), ≥120dGB (AC filter on)

A/D converter: resolution 24 bit

Sampling: 32000 Hz/channel, 16.000 sampling/sec.

Pacemaker detection: width ≥±2mV ≥0.1ms with automatic filter, 1000 samples/channel

Sensitivity: 1.25, 2.5, 5, 10, 20, 40 mm/mV, 10/5, 20/10 mm/mV, AGC

Speed: 5, 6.25, 10, 12.5, 25, 50 mm/sec.

Recording mode: 3×4, 3×4+1R, 3×4+3R, 6×2, 6×2+1R, 1R

Working mode: automatic with pre-sampling, automatic real time, trigger, periodic sampling.

Analysis and interpretation: parameters calculation and automatic interpretation. Algorithm verified on CSE Diagnostic Database.

Analysis and interpretation validated in accordance with IEC 60601-2-25

Functions: ECG sampling, DEMO mode and calibration mode.

Filters: EMG: OFF, 25/30/40. AC: OFF, 50/60hz,
Lowpass: 75, 100, 150 Hz

Base line: 0.05, 0.15, 0.25, 0.32, 0.5, 0.67 Hz

System check: self-test for network board, printer, ECG acquisition, battery status, memory, keyboard and buttons, display.

Local memory: archive up to 1.000 ECG in DICOM, PDF, XML, JPG, BMP format.

Data Transmission: exams can be exported to PC via SD card, U-disk, LAN, USB cable, patient information can be retrieved from the archive and ECG data can be interfaced to PACS via standard DICOM® protocol.

Wireless data transfer: optional, can support ECG transmission to Bluetooth ECG and PC-ECG or ECG data management software, can support data acquisition of patient's info from server.

Communication: IP/LAN, FTP, DICOM®, HL7, Work-list.

Recorder

Type: built-in, for thermal paper roll

Resolution: 8 dot/mm vertical, 40 dot/mm horizontal

Width: 210mm, can support roll or Z-fold paper

Standard accessories

10-wire patient cable, precordial and peripheral electrode set, Gel bottle, thermal paper roll, power cable, rechargeable battery, user manual.

Optional accessories

PC software, trolley, barcode scanner, SD card.



PROGETTI S.r.l.
Strada del Rondello, 5
10028 Trofarello (Torino) - Italy
Ph. +39 011 644 738
Fax +39 011 645 822
info@progettimedical.com
www.progettimedical.com



ISO 13485:2016 CERTIFICATION



Quality system ISO certified

Distributed by: