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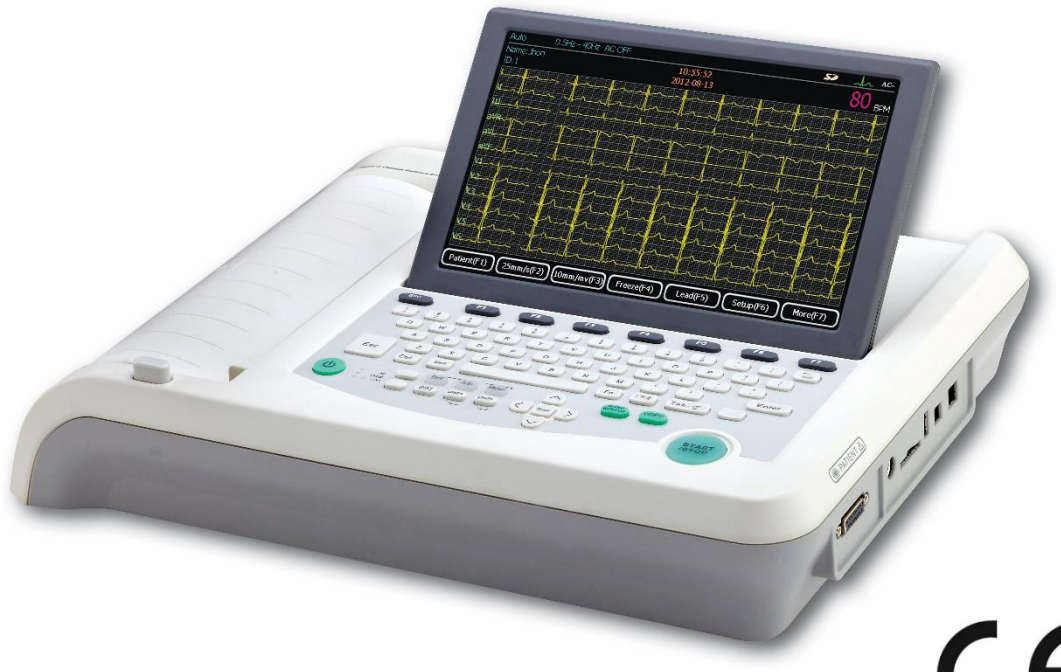
EP-LU30103 Electrocardiograph LUMED® EUROECG 1201



CE 0476

NB the product is subject to changes without prior notice.

Description

EUROECG 1201 is a high resolution digital electrocardiograph for adult and pediatric patients. It acquires the 12 leads in isochronous mode and prints on A4 / Letter paper, in various formats. EUROECG 1201 shows the acquired signal also on its color LCD display, in real time or as a review of an exam already acquired and stored. It is equipped with internal memory and additional memory on a removable card. EUROECG 1201 also features automatic interpretation and ECG parameters calculation.
The main features of EUROECG 1201 are:

- Colour graphic TFT LCD display, foldable
- Powered by mains or internal battery (included)
- Automatic ECG Measurement and Interpretation
- Automatic Screening Mode
- Storage up to 1.000 ECGs in several formats: DICOM, PDF, SCP, FDA-XML, XML, JPG, BMP
- Bi-directional DICOM® interface
- HL7 interface
- High-resolution signal
- Detection and processing of Pacemaker's spikes
- Use of external devices, like as USB keyboard, PCL-6 printer or Bar-code reader
- Direct connection to the PC network
- Slip-in transport handle
- PC Software (optional)

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Technical Data

LANGUAGE	Italian, English, Spanish, French, Portuguese, Romanian, German, Polish.
ACQUISITION	Simultaneous acquisition of 12 leads
DERIVATIONS	12 Standard, Cabrera, Frank, Right Chest leads, Posterior Chest leads, custom
OPERATING MODES	- Automatic (real-time or pre-sample) - Manual - Rhythm - Programmed - Trigger - Screening - Preview screen - Freeze & Review
A / D CONVERSION	12 bit
INPUT CURRENT	< 0.01 pA
NOISE LEVEL	<15 μV
DYNAMIC RANGE	±400 mV
INPUT IMPEDANCE	> 50 MQ 10Hz
INPUT VOLTAGE	for each channel not less than ± 7.5 mV
ENTRANCE	Floating, protected against defibrillation discharges
CMRR	>100 dB no filters AC and >120 dB with AC filter
FREQUENCY RESPONSE	0.05Hz - 150 Hz
TIME CONSTANT	> 5 s
SPEED	5, 6.25, 10, 12.5, 25 e 50 mm/s ±2%
HEART RATE	30 - 300 bpm Precision: the greater between ± 1 bpm or ±1 % of the value
GAIN, SENSITIVITY	1.25, 2.5, 5, 10, 20 e 40 mm/mV tolerance ±2% Automatic gain (limbs / chest) 10/5 or 20/10 mm/mV Automatic Calibration 1 mV ±2%
SAMPLING RATE	Acquisition: 2.000 samples/channel/sec Storage and processing: 1.000 samples/channel/sec
PACEMAKER DETECTION	Amplitude : ±2mV ~ ±700mV, Duration: 0.1 ms ~ 2.0 ms Detection sensibility is user selectable
QUANTIZATION	4.563 uV/LSB
ECG GRID	Available in ECG displays
DISPLAY COLORS	At least three color schemes
FREEZE AND PLAYBACK	Up to 300 secs of ECG
AUTOMATIC ACQUISITION OF 10 SECONDS	Pre-sample Real Time Trigger Periodic
DATA MODE	ECG, Demo, Calibration

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INTERNAL PRINTER	Thermal printer, for 210 mm Roll or A4 215 mm z-fold thermal paper Vertical resolution > 8 dots/mm Horizontal resolution > 32 dots/mm (25 mm/s) > 16 dots/mm (50 mm/s)
PRINT FORMATS (BUILT-IN THERMAL PRINTER)	- Automatic: 12x1, 6x2+1R, 6x2, 3x4+3R, 3x4+1R, 3x4 (duration 10 secs, rythm leads are selectable) - Manual: 1, 2, 3, 6, 12 channels - Rythm: 1 or 3 selectable leads, duration 60 secs - Periodic: like as Automatic, printout frequency 1 to 60 min, duration 1 to 60 min - Trigger: like as Automatic, the printout occours only in case of an event (arrythmia etc.) - Screening: like as Automatic, but with short ECG evaluation
EXTERANL PRINTER (OPTIONAL)	Type: USB PCL-6 native Layout: 12x1, 6x2+1R, 6x2, 3x4+3R, 3x4+1R, 3x4
FILTERS	- EMG (muscolar tremors): 20, 25, 30, 35, 40, 45 Hz - Mains Interferences: 50 or 60Hz - Baseline correction (high-pass) 0.05, 0.15, 0.25, 0.32, 0.5, 0.67 Hz - Artefacts (low-pass): 75, 100, 150 Hz
DISPLAY	- Size and resolution: 10”, 800×480 pixel, 220x135 mm; - Type: TFT LCD graphic colour - Ergonomy: tilting 0°-90° - Available data: 1 to 12 ECG waveforms, patient data, date\time, operating mode, battery status, Heart-Rate, ECG parameters (filters, speed, amplitude etc), contact (each and every electrode or lead), paper status, memory status Layout: 12x1, 6x2+1R, 6x2, 3x4+3R, 3x4+1R, 3x4
ERGONOMY AND USER INTERFACE	- Intuitive and clear Graphic Interface, User Friendly layout and commands - Foldable & tiltable Display 0°-90° - Built-in carrying handle - Extended alphanumeric keybord - Solid Brass screw dies, to fix the devcie on shelves trolleys etc.
ECG LAYOUT	12x1, 6x2+1R, 6x2, 3x4+3R, 3x4+1R, 3x4, 3R, 1R
ECG DISPLAY MODE	Simultaneous or Sequential
ALGORYTHMS FOR 10 SECS. ECG PROCESSING	- ECG interpretation - ECG classification - ECG global measurements (Heart Rate, PR interval, QRS duration, QT/QTc, R/QRS/T electric axis, RV5/SV1 amplitude) - ECG lead-by-lead measurements (QRS type, duration [PR, QRS, QT], duration and amplitude [P, Q, R, R’, S, S’], amplitude [P’, T, T’, STJ, ST40, ST60 and ST80) - Signal Averaging for the 12 leads
KEYBOARD	Extended alphanumeric, with function keys and dedicated keys for fast operations
INTERFACE	Ethernet Board RJ45, USB-A Master, USB-B Slave, SD card WiFi is optional
ALARMS & SIGNALS	Alarms: No paper, electrode and skin contact quality, battery charge status
SELF DIAGNOSYS	Autotest for display, keyboard, memory, battery, ECG acquisition, Ethernet board, thermal printer, log.
ECG COPY	Copy of the last ECG, recorded in Automatic mode.

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ECG STORAGE	Up to 1.000 ECGs in digital format. Files include patient data, ECG leads etc. List of the archive content.
ECG FORMAT	DICOM, PDF, FDA-XML, euro_ecg XML, SCP, BKG, JPG, BMP
DICOM®	· 12-Leads ECG Storage, General Waveform ECG Storage, Encapsulated PDF Storage · Modality Worklist
DATA EXCHANGE & COMMUNICATION	- DICOM Modality Worklist - HL7 - delivery File System over FTP - Computers can acceed to the storage, as a generic USB volume.
REPOSITORY MANAGEMENT	Operators can add or modify personal data. The system allows you to manage exams: delete, transmit, preview, export, search, print, etc.
USB PERIPHERALS (OPTIONAL)	Barcode scanner, PCL-6 printer, keyboard (all these parts are optional)
POWER & AUTONOMY	AC: 100~240 V, 50/60Hz, 0.17A - 0.4A with Medical Grade adaptor. DC: internal Li-IO rechargeable battery, autonomy >= 2 of continuo sprint , >= 700 ECGs recorder in Automatic mode or >= 7 hours without printing
SIZE & WEIGHT	420x400x95 mm, approx. 5,2 kg battery included
ENVIRONMENT	Transport & Storage: Temperature -20°C ~ +55°C, Relative Humidity < 93%, Atmospheric Pressure 50-106 kPa Use: Temperature +5°C ~ +55°C, Relative Humidity < 80%, Atmospheric Pressure 86-106 kPa
PROTECTION GRADE	IP X0
SAFETY	IEC Class I Type CF
STANDARD ACCESSORIES	4mm Banana IEC patient cable, reusable chest and limbs electrodes, gel ECG spray, thermal paper (roll and Z-fold), Schuko power cord (others available on request), internal rechargeable battery, User Manual.