

## Technical specifications

CE  
0470

Power supply	A.C. mains with external power supply 230V±10% 50/60 Hz.; available also: 115V±10% 50/60 Hz. Rechargeable NiMH batteries, 10x1,2 Volt, 1800 mAh
Battery power capacity	2 hours, more than 300 recordings
Writing system	Thermal printer, 8 dot/mm. Usable print height 110 mm
Thermosensitive paper	Rolls : length 20 m, page 120x100 mm, gridded Z-Fold : length 30 m, page 120x100 mm, gridded
Monitor	Backlit graphic display 32x120 pixels (61x16mm), 2,5 inches
Keyboard	Membrane, with functional and simplified alphanumeric keyboard
Leads	12 standard/cabrera
Signal memory	10 seconds each lead in automatic mode
Print channel	6
Print format	3, 3+R and 6
Operating modes	Manual: acquisition and printing in real time Automatic : simultaneous acquisition of the 12 leads Pre-programmed: simultaneous acquisition at programmable intervals Arrhythmia: detection of arrhythmia events (optional) HRV: acquisition and processing of heart rate variation (optional) PC ECG: transmission of signal in real time to Personal Computer (optional) Paper Saving: acquisition without printing (optional)
Recording sensitivity	Manual: 5 - 10 - 20 mm/mV ± 5% Automatic: according to number of printed channels
Paper speed	5 - 25 - 50 mm/s
Defibrillation protection	Internal
Input dynamics	± 300 mV @ 0 Hz.± 5 mV in pass band
Input impedance	> 100 MW on each electrode
Common mode rejection	> 100 dB
Frequency response	0,05 - 150 Hz (-3dB)
Time constant	3,3 s
Acquisition	11 bit 1000 samples/s/channel printing and filters 500 samples/s/channel in calculation and filters Resolution 5 MicroV/bit
Pacemaker recognition	Recognizes pulse in accordance with current IEC standards
Filters	Mains and muscle interference: modified digital notch 50 - 60 Hz, switch on/switch off filter Anti-drift: digital high-pass 0.5 Hz, linear phase, always enabled and without morphological distortion
Serial interface	Infrared
Diagnostics programs	Parameter calculation (optional) Electrocardiogram interpretation (optional) Arrhythmia (optional) HRV : heart rate variation (optional)
Options	Memory option, ECG measurements option, ECG analysis option, arrhythmia option, HRV analysis option, PC archive option, PC ECG option
Dimensions	320 x 72 x 240 mm (length x height x depth)
Weight	1850 grams without paper
Safety and Conformity to standards	Class I, type CF Ref: EN 60601-1, EN 60601-2-25, IEC 60601-2-51 According to: 93/42 CEE: class IIa CE0470

CARDIOLINE® ar1200adv

Tradition and reliability  
for a continue evolution

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CARDIOLINE®  
is an et medical devices SpA brand

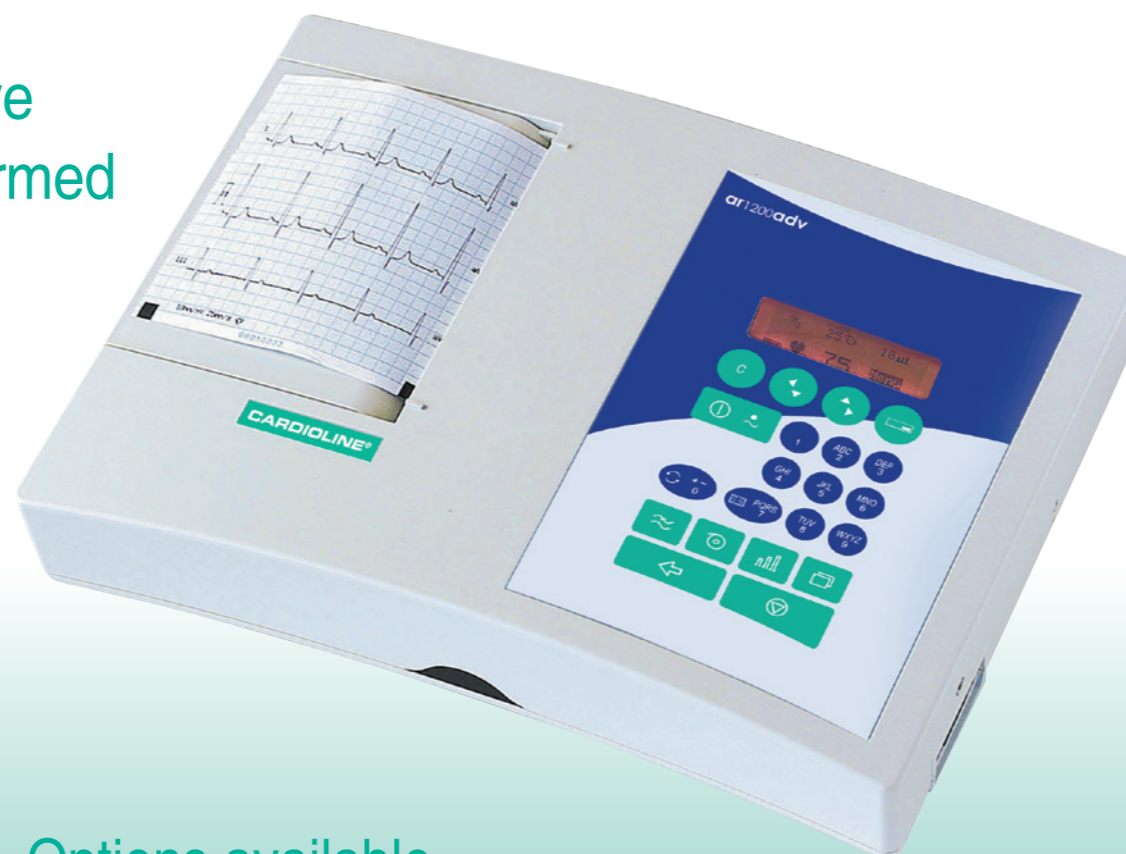
Quality management system certified according to EN ISO 9001: 2000 - EN ISO 13485: 2003 - Certificate N. 800278

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ar1200adv combines multiple levels of performance in a multichannel ECG recording with all the features of reliability, modularity, versatility and upgradability that characterize the latest generation of CARDIOLINE® electrocardiographs

In short, a multi-channel electrocardiograph providing solutions that will help improve the quality of diagnosis performed by specialists and hospital staff alike



## Tradition and reliability for a continue evolution

**Safe and easy wireless connection**  
thanks to the IR (Infrared) digital interface.

**User friendly interface**  
the liquid crystal display and a simplified set of alphanumeric keys ensure quick and troublefree use under any conditions, and dependable ECG examination and patient management.

**Easily adapted to suit your individual requirements**  
affording an advanced diagnostics support and facilitating the communication and transfer of information. The selection of the "options" offered has no restrictions or constraints, it has no effect on day-to-day use of the instrument and upgrades can be made directly at your clinic or surgery.

## Main features

- Automatic, manual and pre-programmed recording mode.
- Multi-channel print format on 120 mm paper: 3, 3+R, 6 channels.
- LCD Display.
- Alphanumeric keyboard.
- Paper in rolls and packs.
- Dual power supply: mains and rechargeable internal batteries.
- Memory of the last ECG recording and printing of additional copies.
- Time and date indication.

## Options available

- Memory option**  
Storage of up to 20 full ECG exams with no need to print out the ECG.
- ECG measurements option**  
Automatic calculation of the main ECG parameters.
- ECG analysis program**  
A useful and dependable diagnostics support. The results obtained by analysing the 12 lead simultaneously can be printed out in a "physician

tailored layout" following the methodology with which a Physician would read an ECG.

- Arrhythmia option**  
Detection of arrhythmia events during continuous recording.

- HRV analysis option**  
Measurement of the heart rate variability in a predicted interval (from 1 to 5 minutes) and printout of the relevant results.

- PC archive option**  
Storage of the ECG in a personal computer running the CARDIOLINE® software for the ECG computerised management. The data upload to the PC are made by use of the wireless "IR" interface; no direct connection to the PC is required.

- PC ECG option**  
Real time display of the 12 ECG leads on a PC endowed with CARDIOLINE® software for the ECG computerised management. The software can offer an optional module for automatic interpretation of the ECG signal.