



ASPEL

ASCARD GREY

v.07.205

ECG signals	- registration of 12 standard ECG leads - presentation of curves in a standard arrangement, Cabrera
Operating mode	- manual, automatic, automatic with rhythm printout
Printing	- printout in mode 1, 3, 6 or 12 ECG waveforms, the ability to print the selected group - rhythm printout during AUTO test and automatic test to clipboard - printing on a camera printer or an external PCL5 / PCL6 printer - printout from the patient database. Possibility to print additional information about the examination and the patient - the ability to set waveform parameters: speed, sensitivity and print intensity
Pacemaker detection	- detection and presentation of stimulus pulses - sound signaling of detected beats
Functionality	- display on the display of 1, 3, 6 or 12 ECG waveforms, results of analysis and interpretation, tests stored in memory - Possible types of tests: manual, AUTO, SPIRO, automatic to the clipboard, AUTOMANUAL, LONG - adjustable recording length of the automatic test - in the range from 6s to 30s - saving the test to the memory from 1 minute to 15 minutes in LONG mode

Functionality	- automatic recording with the function of recording to the "clipboard" ECG signal from all 12 leads at the same time, and then depending on the settings: printing the test, analysis, interpretation or saving the test to the database - backward writing for automatic examination to the clipboard and for manual examination - definable test stages according to the parameters set for the AUTOMANUAL test - saving the test to the memory from 1 minute to 15 minutes in LONG mode - easy operation thanks to the menu operated via the touch panel - reviewing the saved tests on the display, with the option of changing the number of leads, gain and speed - automatic analysis and interpretation in accordance with EN 60601-2-51 (CSE database) - results of analysis and interpretation depending on the age and sex of the patient - continuous measurement of heart rate (HR) and its presentation on the display - open-hearted work - an apparatus adapted to direct work on the open-hearted - INOP detection of electrode disconnection independent for each channel - defibrillation pulse protection - export of tests to a USB stick, to an e-mail box or to another camera using the EKG-MAIL service - wired communication with LAN network or Internet - cooperation with CardioTEKA and CardioTEL software - spirometry screening using the SPIRO-31 attachment - EDM - archiving tests for a given period on an external storage device (USB stick)
Display	- 800x480 color TFT with touch panel - 7" screen
Keyboard	- alphanumeric membrane keyboard with function buttons
ECG signals	- 12 standard leads: I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6
Sensitivity	- 2.5/5/10/20 mm/mV (+/- 5%)
Recording Speed	- 5/6,25/10/12,5/25/50 mm/s (+/- 5%)
Filters	- isoline filter: 0.15Hz, 0.45Hz, 0.75Hz, 1.5Hz - network noise filter: 50Hz, 60Hz - muscle interference filter: 25Hz, 35Hz, 45Hz
Paper	- thermosensitive paper, dust-free - paper width 112mm
Memory	- patient and research database. Memory for up to 1000 patients or 1000 tests
Sampling frequency	- 8000 samples / s per channel (uniform sampling)
A/D conversion resolution	- 12 bits

Skew between channels	- <100µs
Quantization amplitude	- 2,54 µV/LSB (+/- 2%)
ECG signal scope	- 10 mV (Vp-p)
Frequency	- 0,05-150Hz (with filters disabled) according EN 60601-2-25
Power supply	- external: AC100-240V, 47-63Hz - internal: 7.2V/2.2Ah battery, up to 130 automated tests
Ports	- USB device, 2xUSB Host - Ethernet
Safety norms	- protection against electric shock (EN 60601-1): class I device - applied part (EN 60601-1), CF type part resistant to defibrillation - medical device class: IIa (rule10) - operation safety: EN 60601-1, EN 60601-2-25 - electromagnetic compatibility: EN 60601-1-2
Dimensions	- (LxWxH) 258x199x50mm
Weight	- <1.3kg
Compatibility	- PC and printer with PCL5/PCL6 - software - CardioTEKA or CardioTEL
Standard equipment	- patient cable - limb electrodes - chest electrodes - ECG gel - 250g - ECG paper - 1 reel - main cable
Optional equipment	- medical equipment bag - extra ECG paper - trolley WB5 - trolley W30W - CardioTEKA software
Certifications	- CE 0197 - EN ISO 13485 - MDD 93/42/EEC - CFS