ECG Stress Test System ars- EFOR



Our products reflect the approach "to design ECG for PC".

KARDINERO

So, it is possible to implement "improvements in computer technology" very quickly and effectively into "ECG technology".

Using electrical power from the PC, ECG module does not require any batteries or extra power adapters.

Using a very flexible USB controller and interface and driver for our ECG device, our design team continuously develops new software modules and applications.

The treadmill for our systems is specifically designed and produced by oour company for cardiologic applications. It is also a PC controlled device.

Our objective is continual enhancement and perfection of our products and services. We have ISO13485:2016 certificate for our quality management system and CE certificate for our products.

PC BASED ECG STRESS TEST SYSTEM

Our PC based ECG system can be used as an ECG stress test system, together with our genuine StressWin Pro software and special treadmill TM Pro series. Personal computer, a laser printer and trolley are the other parts of the system. Our software runs under Windows 7, 8 and 10 operating systems. During stress testing, ECG signals can be monitored on the PC monitor screen, recorded on the hard disk and printed for reporting.

StressWin Pro software performs signal averaging, ST level measurements; and controls the treadmill's speed and slope, and shows all this information also on the monitor screen.

The user can set ECG display and print-out parameters using the Setup Menu. These parameters include signal and background colors, lead configurations on the screen and print-out, sampling rate, filter options, etc.

ECG data can be shared on one computer or on a network, using our "ECG Data Management (EDM)" software. Configuring and installing our ECG system, a Holter and an ABPM on the same PC, you can build a "Cardiologic Diagnostic Workstation".



Technical Specifications

ECG SPECIFICATIONS

Microsoft Windows based genuine stress ECG software: StressWin Pro PC based use: Windows 7, 8 or 10 compatible 12 lead real time ECG monitoring and recording Bruce, Naughton, etc, all protocols, almost unlimited protocol editing. Real time continuous ST level and slope graphs Real time continuous avaraging and display Heart rate display Freezing, reviewing, printing ECG signals on the screen Event recording and backwards scaning Manual change of treadmill parameters during test, jumping to the next step Saving ECG raw data for review, reprint (approx. 10000 patients per 100 GB memory Electrode contact problems display Screen formats, user selectable: 6x2, 3x4, 12x1, 6x1 and 1 channel Standard leads: DI, DII, DIII, aVR, aVL, aVF, V1-V6 Sampling rate: max 4000 sps Frequency response: 0.05 - 300 Hz Time constant: 3.2 sec Common mode rejection ratio (CMRR): 120 dB Sampling sensitivity: 0.4 µV Resolution: 16 bit Defibrillator protected patient cable and input circuits Software controlled digital filters: EMG, baseline correction and line interference filters Gain control: 5- 10- 20- 40 mm/mV Recording speed control: 12,5-25-50-100 mm/sn Remote support via internet REPORTING Print-out from a laser printer ST level, ST slope, heart rate trend graphs Patient information and doctor's remarks **Event recordings** Blood pressure trend graph **Report summary** Programmable reporting by the user Averaged and raw data drawing options

TREADMILL

Automatic control by the PC via software Speed control: 0- 17 km/h (optional 25 km/h) Slope control: 0- 25% Walking area: 55x145 cm Motor power: 2.2 KW- 3 HP Load capacity: 180 kg (optional 240 kg) Emergency stop button

ORDERING INFORMATION

700130 ars-EFOR- Pro (FP) ECG Stress Test System with Treadmill
700150 ars-EFOR Plus ECG Stress Test System with Treadmill
700180 TM-PRO 2200 Treadmill
600910 USB ECG Mini Module (ECG module only)
600322 ECG patient cable, clamp type tips
690330 StressWin Pro System Software
900010 Millimetric grid ECG paper, 500 pages pack, A4
600300 USB Patient cable belt, mini
610030 System trolley
700120 ars- Efor Pro 2000 Kit
ADDITIONAL OPTIONS
790120 Suntech Tango M2 Automatic Blood Pressure Monitor
790160 Vacuum electrode system

790180 Bicycle Ergometer

* Please ask for your special PC and printer requirements.

Kardinero is an ISO 13485:2016 certified company. Our products have CE certificate according to MDD 93/42/EC by BSI (2797)

KARDI**NER**O

PC Based ECG System ECG Master USB



Our products reflect the approach "to design ECG for PC".

So, it is possible to implement "improvements in computer technology" very quickly and effectively into "ECG technology".

USB connection facilitates a data acquisition path, which is fast enough to have high resolution ECG data, sufficiently flexible to have a plug & play connection to actual PCs, and adequate to supply the ECG device with electrical power.

Using electrical power from the PC, ECG module does not require any batteries or extra power adapters.

Using a very flexible USB controller and interface and driver for our ECG device, our design team continuously develops new software modules and applications.

Our objective is continual enhancement and perfection of our products and services. We have ISO13485 certificate for our quality management system and CE certificate for our products.

PC BASED ECG SYSTEM

PC based ECG system consists of an EKG Master USB module with its patient cable, any kind of PC comprising a USB port, a laser printer and the WinEKG Pro software. The software runs under Windows operating systems, 7-8.1-10.

ECG can be monitored on the PC monitor, saved for reporting, reprocessed and printed.

The user can select and set ECG viewing and printing options through the Setup menu. These options include signal and background colors on monitor screen, channel configuration on the screen and on the print out, sampling rate, and default gain and filter options for screen view and for print-out.

ECG data can be shared under a PACS/ DICOM network; DICOM Worklist, DICOM Query and Retrieve compatible.

Combining ECG device with treadmill, Holter, ABPM, respiratory function analyzer and other computer based equipment on the same computer, you may create your own cardiologic workstation.

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Technical Specifications

WinEKG Pro SOFTWARE SPECIFICATIONS

12 lead real time User selectable display formats: 1 to 12 leads, easy to configure Software filters: low pass, high pass and line interference filters Signal gain: 5-10- 20- 40- 80 mm/mV Time scale: 6,25-12.5- 25- 50- 100 mm/sec Data format: SCP-ECG Selectable display colors for background, grid, signal &text Print out on normal A4 paper: grid printing Software available in English and Turkish (other languages on request) Patient data entry, DICOM connection HARDWARE SPECIFICATIONS Standard leads: DI-DIII, aVR, aVL, aVF, V1-V6 Sampling rate: max 4,000 sample/sec Frequency response: 0.05 - 300 Hz Time constant: 3.2 sec Common mode rejection ratio (CMRR): 115 dB Sampling sensitivity: Better than 0.4 µV Resolution: 16 bit A/D conversion Dynamic range: 12 mV Defibrillator protected input circuits and patient cable Long term recording and monitoring up to 1 hour Leads- off detection Pacemaker detection

POSTPROCESSING

Reviewing and reporting of complete ECG data Precise manual measurements on ECG signals Full disclosure print out Adjustable display formats while reviewing **PC REQUIREMENTS**

PC, Notebook or Netbook with USB port (USB compatible) MS Windows 7-8.1-10 Power Consumption: 280 mA max. from USB port Suspend Current: Less than 500 μA To be compatible to EN 60950 standard **PATIENT SAFETY**

Patient Leakage Current: Less than 10 μA EN 60601-1 Electrical Safety EN 60601-2 EMC CE Directive 93/42/EEC



ECG Acquisition module- back view

Our company is ISO 13485:2016 certified by BSI CE Certification by BSI (2797)

OPTIONAL

ECG Interpretation Software

ORDERING INFORMATION

600322 ECG patient cable, clamp type
600311 ECG patient cable, banana tip
690320 WinEKG Pro Software
900010 Millimetric grid ECG Paper, 500 pages pack, A4
600340 ECG chest suction electrodes set, 6 pcs
600330 ECG metal extremity electrode set, 4 pcs





Disposet was founded in 2003 for the production of single use medical equipment.

Disposet has it's own R&D, prototyping, mold design, injection, extrusion, assembly, packaging and EtO sterilization capabilities.

Disposet focuses on disposables, especially for anesthesia & intensive care, hematology, cardiologyand cardiovascular surgery.

Disposet also provides OEM components and semi-finished production services to other major global medical companies.

The product portfolio keeps growing with continuous R&D; always considering the needs of the market and health professionals' requests.



MEDICAL DISPOSABLES



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