CARDIO M-PC

Ideal module to record and analyze 12-lead ECG

12-lead ECG system based on computer

Cardio M-PC is an ideal module to record and analyze recorded ECGs. It provides a full-featured, portable ECG that has important advantages compared to traditional ECG machines. Also it meets all the requirements of modern PC technology. Integrated USB port enables a simple connection and mobile use along with a notebook PC.

Cardio M-PC is provided together with a powerful ME-diagnostic center software. HL7 interface enables an easy connection to the doctor's offices and hospital EDP systems.

The stored resting and stress-ECGs may be shown from different perspectives and compared with up to 5 further ECGs.

During the ergometry all compatible treadmills, bicycle ergometers and blood pressure monitors are automatically controlled and all ECG leads are continuously analyzed and stored.

Features and Benefits

- The most modern combination of microelectronics and a supreme ECG software
- Network access to all data
- 12-Channel ECG, Einthoven, Goldberger, Frank, Nehb
- Interval- (8 / 16 / 32 sec) and continuous ECG recording
- ECG presentation and comparison
- Automatic measurement and interpretation using Mortara-Rangoni Algorithm
- Heart-Rate-Variability (HRV)
- Arrhythmia detection
- 2D / 3D vector
- Emergency ECG
- Network for up to 256 working stations (option)
- Expandable with spirometry, holter NIBP, holter ECG
- GDT / HL7 / HIS interface support
- Return of clinical reports to HIS or office operation systems
- Easy export and record as HTML site
- Stress ECG with ST segment monitoring
- Control of ergometers, treadmills, and blood pressure monitors
- Mobile ECG (with a notebook)
- Take-over of all patient data via HL7
- Use of work list (order management)

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< Example of use >

User-friendly Operation

- Real-time or stored ECG tracings are clearly displayed on a computer monitor, and may be printed whenever desired on inexpensive standard printer paper. Costly ECG paper is no longer needed.
- Context-sensitive help messages make the system easy to use.
- A built-in text editor can be used to create, edit, store and print notes and comments.

Precise and Reliable ECG Anlaysis

- ECG data is easily collected and stored using the standard 12-lead configuration, or using the Frank lead configuration. In the Frank lead configuration, a vector ECG is automatically stored.
- Automatic evaluation and diagnostics facilitate the physician's diagnoses.
- The CardioM-PC system is also designed to readily interface with commonly used peripheral devices in the Exercise Stress Testing or physiology laboratory. The system can automatically control a treadmill or cycle ergometer/bicycle while recording the 12-lead ECG.

Advanced Data Management

- Stored ECG data can be accessed at any time. Multiple recordings from a single patient can be easily evaluated and compared.
- The CardioM-PC database provides a user-friendly interface that can accommodate even the largest clinical and research needs. The system is capable of handling 2 million patients each with a maximum of 1000 ECG tracings.
- The CardioM-PC system can be easily installed on any appropriate PC with a USB interface. It can be used in local networks, or can be installed on a portable computer (notebook) for mobile use.

< Example of use >

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Specifications

Diemension

Size:	131 (W) x 73 (D) x 25 (H) mm
Weight:	140 g

ECG

Leads:	12 Standard, Frank, Nehb
Sampling rate:	2000 Hz per channel
Input impedance:	> 10 MΩhm
Precision:	0,05 µV/bit
A/D converter:	24 Bit
Patient protection:	floating common (IEC-601, BF type)
Shock protection:	Class II
Defibrillator protections:	5 kV (max. 1kV/msec)
Resolution:	2,44 µV/bit (12 bit A/D)
CMRR:	> 120 dB
Polarization voltage:	400 mV
Time constant:	1.6 sec
Linearity error:	< 0.5% < ½ LSB
Filters:	524 Hz low pass (hardware, constant)
	50, 100, 200 Hz (changeable)
	60, 120 Hz (changeable)
	35 Hz tremor (changeable)
PC Connection:	via USB
ECG Connection:	15 pin standard
ECG Connection:	15 pin standard

Software

Measurement / Interpretation:	Mortara-Rangoni (also for children > 2 years)
Interface functions:	GDT, HL7, DICOM, HRV, Arrhythmia detection, 2D / 3D ECG vector, emergency ECG, ECG report transmission via Internet, ergometry

PC-requirements

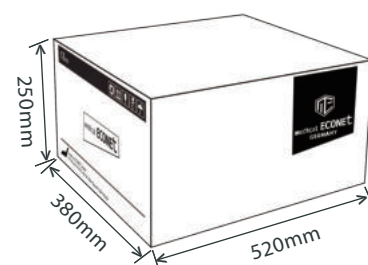|	
Operating system:	Windows 7, Windows 8
Processor:	min. 1,6 GHz Dual Core
Memory:	min. 2 GB RAM
Hard disc:	min. 500 GB
Interface:	1 x free USB port

Others

PC connection:	via USB
Power supply:	via USB port: + 5 V (100 mA)
ECG connection:	15 pin standard
LED Status indication:	yellow LED slow blinking = USB connected solid light = ECG monitoring
Safety:	IEC 601, class II, Type BF

Options

USB Resting:	12-lead resting PC ECG with GDT Interface & Interpretation
WIFI Resting:	12-lead resting PC ECG with GDT Interface & Interpretation
USB Net:	Network licence for CARDIO M-PC USB
USB Ergo Net:	Network and ergometry licence for CARDIO M-PC USB

Packaging

250mm
380mm
520mm

Approx. 0.3 kg

medical ECONEt

Distributor

IBS GROUPE