



- Compact design and high performance
- High quality and easy-to-use features
- Simultaneous acquisition of up to 12 leads
- Lead-Failure, Pacemaker pulse detection
- Fast and advanced interpretation and analysis
- Real-time continuous recording of 3,6 channels

# THE **YM303i** ELECTROCARDIOGRAPH

12 Lead Resting ECG Analysis System  
3Ch Electrocardiograph



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## High Quality and Convenience

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### Advanced Interpretation and Analysis

YM303i has the clinically proven interpretation program of diagnostic information with regard to rhythm, electrical axis, QR5 morphology changes, conduction defects, hypertrophy characteristics, ST-T change, myocardial infraction, etc

# ELECTROCARDIOGRAPH



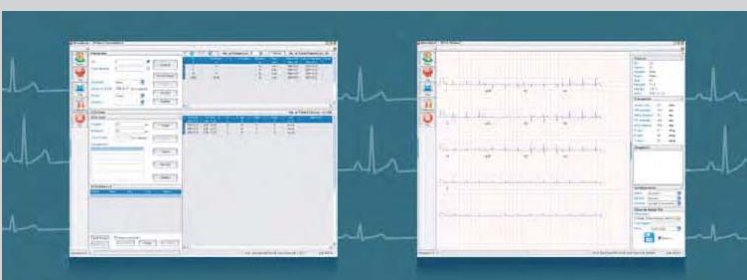
## Features

- Compact & light weight design allows advanced usability
- Color TFT LCD (480X272dots)
- Multi-language display
- LCD preview of ECG signal, display of lead failure and signal noise
- One-button operation for acquisition, analysis, storage and printing
- 80mm width Z-fold and Roll type paper both useable
- 100ECGs data storage in internal memory
- Using the SD-Card, YM303i can store up to 5000 ECGs. ECGs can be edited, printed and transmitted
- Rechargeable battery operation
- Easy and fast firmware upgrade through USB memory stick

## Accessories



## ECG Management System



- Using the RS232, LAN or SD-card, ECGs can be transmitted to PC(Mecalyzer) from the cardiograph for ECG management
- Server/Client network service capability Image (Jpg or bmp)REPORT printing capability
- XML ECG file format

## Display

Type	4.3 inch Color TFT LCD
Resolution	480 X 272 dots

## Computerized Electrocardiograph

ECG Storage	Basic - 100ECGs (typical), Option- 5000 ECGs in SD Card
Acquisition & Analysis	12Leads simultaneously
Dynamic Range	AC differential : $\pm 5$ mV, DC offset : $\pm 300$ mV
Sampling Rate	2000 samples/second/channel
Frequency Response	0.04 to 150Hz
Common Mode Rejection	$\geq 100$ dB
Input Impedance	$\geq 10$ M $\Omega$
Communication	PC communication with RS232 interface and LAN
Firmware Upload	Use the USB memory stick
Filter	AC Line Filter: 50,60 Hz Low Pass Filter : 40, 100, 150Hz High Pass Filter: 0.04, 0.05, 0.16, 0.1, 0.3Hz Muscle Filter: 25, 35Hz Anti-Floating System(AFS)
Lead-Fail Detection	Lead fail alarming of each electrode by visual and sound warning
Pacemaker Pulse Detection	LCD preview and indication on recording paper of pacemaker pulse

## Writer

Type	Thermal dot array[Voltage axis:8dot/mm, Time axis: 16dots/mm]
Speeds	5, 10, 25, 50 mm/sec:
Number of Traces	3 or 6 user- selectable
Sensitivity /Gain	5,10,20 mm/mV
Speed Accuracy	$\pm 5\%$ [Maximum]
Amplitude Accuracy	$\pm 5\%$ [Maximum]
PaperType/Size	Z- fold : 80mm $\times$ 80mm [300sheets/pack], Roll : 80mm $\times$ 30m

## Electrical

Power Supply	AC or Battery operation
AC Input	100 - 240VAC 50/60Hz, 70VA
Fuses	Qty 2, 250Vac T6,3AL, IEC[5x20mm]
Battery Type	Rechargeable Nickel Metal Hydride Cylindrical Cell Standard: 9.6V 2700mAh, Large: 9.6V 3800mAh
Battery Capacity	Standard: 100 basic reports (Automatic Mode) or 3hours continuous operation (without printing) Large: 200 basic reports (Automatic Mode) or 4hours continuous operation (without printing)
Battery Charge Time	Approximately 5hours

## Physical

Dimension	311 $\times$ 242 $\times$ 84 (W xLx H)mm
Weight	2.5Kg (including battery) without paper

## Environmental

Operating Conditions	Temperature range 10, 45 $^{\circ}$ C Humidity range 20%-95% [not condensing] Atmosphere Pressure: 700 to 1060 hPa
Storage/Transportation Condition	Temperature range -15-50 $^{\circ}$ C Humidity range 20%-95% [not condensing] Atmosphere Pressure: 500 to 1060 hPa

## Safety

Type of protection against electrical / shock	Class 1, internally powered
Dust and water resistance	IPX0
Patient mode of operation	Continuous
Patient leakage current	$< 10 \mu$ A
Degree of protection against electrical shock	Type CF with defibrillation protection
Maintenance frequency	Daily visual inspection and routine cleaning (if needed) Performed by user. Use a commercially available, industrial strength disinfectant cleaner on any part of the equipment(other than electrodes) which comes into direct contact with the patient. Every six months routine maintenance checks and test performances are recommended.
Certification	Certified for IEC60601 - 1 CE marking for council Directive 2007/47/EC concerning Medical Devices meets applicable IEC60601-2-25, IEC60601-2-51 requirements



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