BeneHeart R12
Electrocardiograph

Technical Specifications

Physical

Height:	128 mm
Width:	365 mm
Depth:	305 mm
Weight:	4.8 Kg

Processing

ECG sampling rate:	1000 samples/second/channel
Pacer detection sampling rate:	16,000 samples/second/channel
ECG amplifier:	DC-coupled
Acquisition mode:	Pre-acquisition or post-acquisition, provide 10 seconds of instantaneous ECG acquisition
Dynamic range:	AC Differential ±10 mV, DC offset ±600 mV
Resolution:	1 µV/LSB
Frequency response:	−3 dB @ 0.05 to 150 Hz
Baseline drift filter:	0.05 Hz, Baseline Drift Removal (BDR)
High cut-off frequency:	20 Hz, 35 Hz, 150 Hz
AC filter:	50/60 Hz
Common mode rejection:	≥110 dB (with AC filter switched off)
ADC:	24 bit
Input impedance:	≥50 MΩ @ 10 Hz, defibrillator protected
Time Constant:	≥3.2 s
Noise Level:	≤15 µV
Patient leakage:	<10 µA
Heart rate meter:	30 to 300 BPM ±10% or ±5 BPM, whichever is greater.
Sensitivity/gain:	2.5, 5, 10, 20, L=10 C=5, L=20 C=10 mm/mV, Auto
Boot time:	≤7 s

Display

Color:	24 bit Color display
Display type:	8 inch diagonal, TFT LCD with LED graphics backlit
Display resolution:	800x480
Display data:	Patient ID, Patient name, gender, age, heart rate, clock, battery power indicator, waveforms, lead labels, speed, gain,
	filter settings, warning messages, information messages, network status, USB

Power

Power supply:	AC input (without external power adaptor) or battery operation

AC Power

Input voltage:	100 to 240 VAC ±10%
Input power:	100 VA
AC frequency:	50/60 Hz ± 3 Hz

Battery

Battery type:	Rechargeable Lithium ion battery, 4500 mAh
Charge time:	≤ 6h to 90% and ≤ 7h to 100% with device off
Battery Capacity:	More than 3.5 hours of continuous operation or 400 ECGs recording

Writer

Writer technology:	Thermal dot array
Writer speed:	5, 12.5, 25 & 50 mm/s
Number of traces:	12 leads
Writer speed accuracy:	±5%
Writer amplitude accuracy:	±5%
Writer resolution:	Horizontal 40 dots/mm @ 25 mm/s, Vertical 8 dots/mm
Paper type:	Thermal Z-fold A4 paper (210 mm x 295 mm)
	US Letter 8.5x11 in (215 mm x 280 mm)

Software

Measurement and interpretation:	Supports measurement and interpretation with the University of Glasgow ECG analysis algorithm
Resting ECG mode:	Records and prints 12-lead resting ECG with 10-second duration as a standard feature
Supported patient information:	Patient ID, secondary ID, name, age, date of birth, gender, race, medication, class, V3 electrode Placement.
Internal storage:	800 ECGs in internal memory
ECG Storage format:	XML, PDF, Mindray
Report Formats:	3x4+1R, 3x4+3R, 6x2, 6x2+1R, 12x1

Additional Functions

Preview and review full ECG report on screen

Reanalyze ECG automatically after changing patient's demographics

Touch screen (Optional)

Connect to external printer directly

Upload XML reports through FTP protocol

Support barcode reader

Wifi (Optional)

USB flash drive storage of PDF and XML outputs

Accessories

ECG patient cable with banana plugs, Limb Clamps, Chest Bulbs (IEC/AHA)

ECG cable with Electrode clips (IEC/AHA)

ECG patient cable with banana plugs, banana to tab lead adapters, ECG tab electrodes

Country-specific power cords

Z-fold thermal paper (Letter or A4)

Trolley

Laser printer

Barcode reader

CE 0123

mindray