

BeneHeart R700/R900

Electrocardiograph



Technical Specifications	
Physical Specifications	
Height	R700 ≤ 153 mm; R900 ≤ 235 mm
Width	≤ 395 mm
Depth	≤ 315 mm
Weight	≤ 5.8 kg
Measurement Specifications	
Frequency response	0.01~500Hz
ECG sampling rate	64000 samples/s (A/D)
Pacer sampling rate	96000 samples/s (A/D)
Common mode rejection	≥ 140 dB (AC filter on) ≥ 123 dB (AC filter off)
Time constant	≥ 3.2 s
ADC	24 bits
A/D resolution	0.1192 μV/LSB
Input impedance	≥ 100 MΩ (10 Hz)
Display sensitivity	Auto, 1.25 mm/mV, 2.5 mm/mV, 5 mm/mV, 10 mm/mV, 20 mm/mV, 10/5 mm/mV, 20/10 mm/mV, (± 5%)
Electrode offset potential tolerance	± 900mV, ± 5%
Minimum signal	20 μV p-p(10Hz)
Calibration signal	1mV ± 1%
Noise level	≤ 12.5 μV (p-p)
Baseline filter	0.01Hz, 0.05 Hz, 0.56 Hz
EMG filter	20 Hz, 35 Hz, OFF
Lowpass filter	150 Hz, 270 Hz, 350 Hz
Notch filter	50 Hz, 60 Hz, OFF
Rejection on power frequency interference	≥ 20 dB
Input signal range	± 10 mVpp
Accuracy of signal reproduction	In compliance with the requirements of IEC 60601-2-25
Defibrillation proof	Enduring 5000V (360 J) charge without data loss or corruption
Baseline recovery time	< 5 s (after defibrillation)
Electrode polarization recovery time	< 10 s
Defibrillation energy absorption	≤ 10% (100Ω load)
AC overload protection	10 s
Channel crosstalk	≤ 0.5mm
Time deviation between channels	< 100μs
Pacer detection	Amplitude: ± 500 μV to ± 700 mV Width: 30 μs to 2ms
HR measurement range	30 to 300 bpm
HR accuracy	± 1% or ± 1bpm, whichever is greater
HR resolution	1 bpm

Display	
Display type	Capacitive, multi-point color touchscreen
Display size	12.1 inches
Display resolution	1280×800 pixels
Display data	patient ID, patient name, gender, age, heart rate, pacemaker, warning messages, information messages, date and time, battery power indicator, network, waveforms, lead labels, pace annotations, user, mode, lead set, display format, speed, gain, filter settings, menu tabs
Power	
Power supply	AC input (without external power adaptor) or battery operation
AC Power	
Input voltage	100 to 240 VAC ±10%
Input current	1.5 to 0.75A
AC frequency	50/60 Hz
Battery	
Battery type	Rechargeable lithium-ion battery, 5600mAh
Charge time	Less than 3.5 hours to 90% and less than 4 hours to 100% with equipment turned off
Battery capacity	At least 500 auto reports, or 1 hour of continuous paper recording, or 8 hours of paperless recording
Shutdown delay	at least 5 minutes after the low battery alarm first occurs
Recorder	
Recorder type	High-resolution thermal recorder
Paper speed	5 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s. (± 5%)
Printing 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 <i>the University of Glasgow 12-lead ECG analysis program</i> and <i>Mindray 12-lead Resting ECG Analysis Algorithm</i> for adults and pediatrics
Resting ECG mode	Records and prints 12-lead resting ECG with 10-second duration
Supported patient information	Patient ID/Patient Name/Gender/DOB/Age/Paced Middle Name/Secondary ID/Race/V3 Placement/Department/Room No/Bed No/Physician/Technician/Indication/Medication/Weight/BP
Internal storage	R900-1500 ECGs; R700-1200 ECGs
Report Formats	3x4, 3x4+1R, 3x4+3R, 6x2, 6x2+1R, 12x1, 6x1(L), 6x1(C)
Extensional Function	
Provide a visual guide for electrodes placement and Detect the signal quality of electrodes	
Pacemaker signal will be marked in a separate channel for a clearer observation	
Additional leads guidance when you need a right chest or posterior wall examination	
Use assistive tools to diagnostic results with graphics when any of critical values “ST Segment Abnormal” is detected	
Standard WIFI 6 and RJ45 Network connector for uploading ECG reports	
Barcode scanner and Trolley (Optional)	
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;"> <p>www.mindray.com</p> <p>P/N:ENG-R700/R900 datasheet -210285X2P-20241104</p> <p>©2024 Shenzhen Mindray Bio-Medical Electronics Co.,Ltd. All rights reserved.</p> </div> <div style="text-align: right;">  </div> </div>	