BeneHeart R700

Electrocardiograph

Technical Specifications	
Physical Specifications	
Height	≤153 mm
Width	≤395 mm
Depth	≤315 mm
Weight	≤5.8 kg
Measurement Specifications	
Frequency response	0.01~350Hz(-3dB)
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)
Gain	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%)
DC offset voltage	±900mV, ± 5%
Minimum signal	20 µV p-p(10Hz)
Calibration voltage	1mV ± 1%
Noise level	≤12.5 µV (p-p)
Baseline drift filter	0.01Hz, 0.05 Hz, 0.56 Hz
Artifact filter	20 Hz, 35 Hz，OFF
Lowpass filter	150 Hz, 270 Hz, 350 Hz
AC filter	50 Hz, 60 Hz, OFF
Rejection on power frequency interference	≥20 dB
Input voltage range	±10 mVpp
Accuracy of signal reproduction	In accordance with the requirements of IEC 60601-2-25
Defibrillation proof	Enduring 5000V (360 J) charge without data loss or corruption
Baseline recovery time	<2.5 s
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 *the University of Glasgow 12-lead ECG analysis program* and *Mindray 12-lead Resting ECG Analysis Algorithm* 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/Second ID/Race/V3 Placement/Department/Room No./Bed No./Physician/Technician/Class/Medication/Weight/ BP
Internal storage	1200 ECGs
Report Formats	3x4, 3x4+1R, 3x4+3R, 6x2, 6x2+1R, 12x1, 6x1(L), 6x1(C)
Extensional Function	
Electrodes connection guide and Leadwire signal quality indicator	
Displays pace annotations in an independent pace channel	
Abnormal waveforms will be marked in red if patient with PVC	
Choose two reports from multiple archived files for a comparison	
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)	