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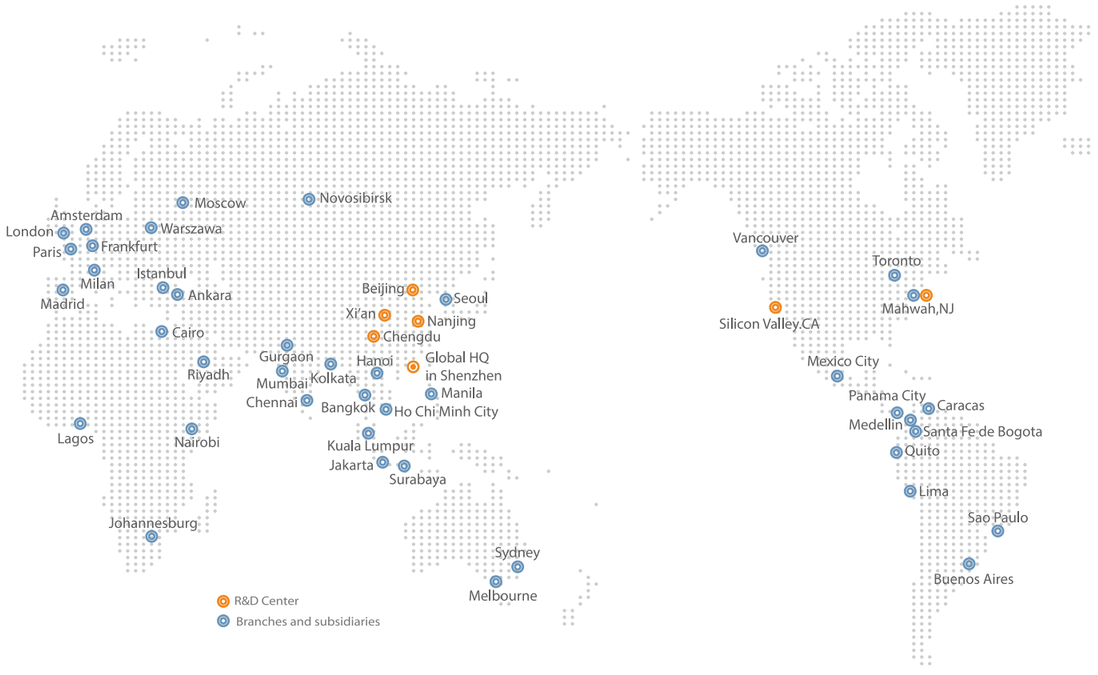
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P/N:ENG-BeneHeart D3 datasheet-210285x4P-20170808

mindray

BeneHeartD3

Defibrillator /Monitor



Technical Specifications

Physical	
Dimensions:	288mm(w)x203mm(d)x275mm(h)
Weight :	
Main unit:	4.7 kg
Battery package (each):	0.54kg
External paddle set:	0.86 kg
Environmental and Physical Requirements	
Water Resistance:	IPX4 (without external power)
Solids Resistance:	IP4X
Temperature:	Operating: 0 to 45 ºC
	Storage: -30 to 70 ºC
Humidity:	Operating / Storage: 10 to 95%.non-condensation
Altitude:	Operating / Storage: -381m to +4575 m
Shock and Vibration:	Meets the requirements of 21.102, ISO9919 (Shock and vibration for transport)
Bump:	Meets the requirements of 6.3.4.2, EN1789 (Medical devices for use in road ambulances)
Free fall:	Meets the requirements of 6.3.4.3, EN1789 (Height of fall: 0.75 m)
EMC:	Meets IEC60601-1-2
Safety:	Meets EN/IEC 60601-1
Display	
Type:	TFT Color LCD
Dimensions:	7 inch
Resolution:	800×480 pixels
Display Waveforms:	Max. 3 channels
Wave Viewing Time:	Max. 16 s (ECG)
Power	
AC Power	
Line voltage:	100 to 240 V~ (±10%)
Current:	1.8 to 0.8 A
Frequency:	50/60 Hz (±3 Hz)
DC Power (through DC-AC Inverter)	
Input voltage:	12 VDC
Power Consumption:	190 W
Battery	
Type:	15.1V, 5600mAh, rechargeable lithium ion battery pack
Number:	1
Charge time:	Less than 3 hours to 90% and less than 4 hours to 100% with equipment power of
Capacity Indicator:	5-segment led indicator for fast battery capacity evaluation
Capacity (new, fully charged battery):	
	Monitoring Mode: 6 hours, Monitoring with a 5-lead ECG,Resp, SpO_2, CO_2 and NIBP measurements set at an interval of 15 minutes.
	Wi-Fi is disabled

	Defib Mode: 200 times, 360J discharge at intervals of 1minute without recording
	Pacing Mode: 4.5 hours, 50 Ohm load impedance, Pacing rate: 80bpm,Pacing output: 60mA
Recorder	
Method:	High-resolution thermal dot array
Waveforms:	Max. 3 channels
Speed:	6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
Paper width:	50 mm
Reports:	Real time waveforms,Event Summary, Tabular Trends, Frozen Waveforms, Review , User test, and Configuration
Auto Recording:	Recorder can be configured to record marked events, charge, shock , Alarm, auto test
Data Storage	
Patient profiles:	Max. 100 patients
Events:	Up to 1000 events for one patient
Waveform Storage:	Up to 24 hours of consecutive ECG waveform
Tabular Trends:	72 hours, resolution: 1 min.
Voice recording:	Max. 180 min in total; max. 60 min for each patient
Data Export:	Data can be exported to PC through USB flash memory
Defibrillator	
Waveform:	Biphasic truncated exponential waveform , with impedance compensation
Energy accuracy:	±2 J or 15% of setting, whichever is greater, into 50 Ohm
Power on time:	Less than 2 seconds with a new, fully charged battery
Charge Time:	Less than 3 seconds to 200 Joules with a new, fully charged battery
	Less than 7 seconds to 360 Joules with a new, fully charged battery
ECG recovery time:	Less than 2.5 seconds
Shock Delivery:	Via multifunction defib electrode pads, or paddles
Patient Impedance Range:	25 to 300 Ω (External defibrillation)
Manual Mode	
Output Energy:	1,2,3,4,5,6,7,8,9,10,15,20,30,50,70,100,150,170,200,300,360 J
Synchronous Cardioversion:	Energy transfer begins within 60ms of the QRS peak
	Energy transfer begins within 25ms of the External Sync Pulse
AED Mode	
Output Energy:	User configurable
AED Shock Series:	Energy level: 100 to 360 J, configurable
	Shocks series: 1, 2, 3, configurable
	Default configuration meets 2015 AHA Guidelines
	CPRmode with 1-channel ECG monitoring
Sensitivity and Specificity:	Meets AAMI DF-80
Noninvasive Pacing	
Waveform:	Monophasic square wave pulse
Pulse Width:	20 ms or 40 ms, ±5%
Refractory period:	200 to 300 ms, ±3% (function of rate)
Pacing Mode:	Demand or fixed
Pacing rate:	30 ppm to 210 ppm, ±1.5%
Pacing output:	0 mA to 200 mA, ±5% or 5mA, whichever is greater
4:1 pacing:	Pacing pulse frequency reduced by factor of 4 when activated
ECG Monitoring	
Lead type:	3 leads ECG, 5 leads ECG
Lead Selection:	3 leads ECG: I, II, III; 5 leads ECG: I, II, III, aVR, aVL, aVF, V
Heart Rate Display:	Adult: 15 to 300 bpm
	Pediatric: 15 to 350 bpm
	Neonate: 15 to 350 bpm
Resolution:	1 bpm

Arrhymia :	Yes
Alarms:	Yes
ECG size:	2.5 mm/mV(×0.25), 5 mm/mV(×0.5), 10 mm/mV(×1), 20 mm/mV(×2), 40 mm/mV(×4), Auto
Sweep speed:	6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s
Patient Isolation (defibrillation proof):	
	Type CF: ECG, RESP, SpO_2 , NIBP
	Type BF: CO_2
Respiration	
Method:	Trans-thoracic impedance
Range:	Adult: 0 to 200 rpm
	Pediatric, neonate: 0 to 200 rpm
Resolution:	1 rpm
SpO_2Pulse Oximetry	
Mindray SpO_2	
Range:	0 to 100%
Resolution:	1%
PR Range:	20 to 300 bpm
Nellcor SpO_2	
Range:	1 to 100%
Resolution:	1%
PR Range:	20 to 300 bpm.
NIBP	
Operating mode:	Manual, Auto, STAT
Static pressure range:	0 to 300 mmHg
Displayed Pressures:	Systolic, Diastolic, Mean
Cuff inflation pressure(Default):	Adult: 160±5 mmHg
	Pediatric: 140±5 mmHg
	Neonate: 90 ± 5 mmHg
CO_2	
Measurement range:	0 to 150 mmHg
Resolution:	1 mmHg
awRR measurement range:	0 to 150 rpm
awRR accuracy:	0<60 rpm: ±1 rpm
	60 to 150 rpm: ±2 rpm