



## BeneHeart D1

Defibrillator



**mindray**  
healthcare within reach

# BeneHeart D1

## Defibrillator

<b>Physical</b>	
Dimensions:	210mm(w)x286mm(d)x79.5mm(h)
<b>Weight</b>	
Main unit:	Pro: 2.3kg (without battery) Public: 2.2kg (without battery)
	Rechargeable battery: 0.50kg Disposable battery: 0.40kg
<b>Environment and Physical Requirements</b>	
Water Resistance:	IPX5
Solids Resistance:	IP5X
Temperature:	Operating: 0 to 50°C Storage: -30 to 70°C
Humidity:	Operating/Storage: 5 to 95 %, non-condensation
Altitude:	Operating/Storage: -381m to +4575m
Shock and Vibration:	Meets MIL-STD-810G, Method 516.6 Meets MIL-STD-810G, Method 514.6 Meets the requirements of 6.3.4.2, EN1789 (Medical devices for use in road ambulances)
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: 0.75m) Meets the requirements of IEC60068-2-32 (height of fall: 1.5m)
Safety:	Meets EN/IEC 60601-1
<b>Display</b>	
Type:	TFT Color LCD
Dimensions:	7 inch
Resolution:	800x480 pixels
Display Waveforms:	1 channel
Wave viewing Time:	6s
<b>Power</b>	
<b>Rechargeable battery( for Pro)</b>	
Type:	3Ah, 14.8V rechargeable lithium ion battery pack
Number:	1
Charge Time:	Fully charged less than 3 hours, 90% charged less than 2 hours with the main unit off
Capacity Indicator:	5-segment indicator for fast battery capacity evaluation
Capacity (new fully charged battery):	Minimum 300 times 200J discharge or 200 times 360J discharge
<b>Disposable Battery (for Public)</b>	
Type:	Li/MnO <sub>2</sub>
Number:	1
Capacity (new fully charged battery):	Minimum 300 times 200J discharge or 200 times 360J discharge
Shelf Life (prior to insertion):	Minimum 5 years from date of manufacture
Standby Life (after insertion):	Typically, 4 years
<b>Pads</b>	
Active Surface Area:	12." <sup>2</sup> (8cm <sup>2</sup> ) each 6.7." <sup>2</sup> (43cm <sup>2</sup> ) each
Cable Length:	82.6", +4" (210cm, +10cm)
Use-by Date:	3 years from date of manufacture.
<b>Data storage</b>	
Patient profiles:	Max. 100 patients

Events:	Up to 1000 events
Waveform Storage:	Up to 8 hours of consecutive ECG waveform
VoiceRecording:	Max. 3 hours
Data Export:	Data can be export to PC through USB fash memory
<b>Defibrillator</b>	
Waveform:	Biphasic truncated exponential waveform, with impedance compensation
Energy Accuracy:	±2 Jor 15% of setting, whichever is greater, into 50 Ohm.
Shock Delivery:	Via multifunction defib electrode pads
Patient Impedance Range:	25 to 200 Ohm
<b>Manual Mode ( for Pro )</b>	
Output Energy:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 70, 100, 150, 170, 200, 300, 360J
Charge Time:	Less than 5 seconds to 200J with a new fully charged battery Less than 8 seconds to 360J with a new fully charged battery
Synchronous Cardioversion:	Energy transfer begins within 60ms of the QRS peak
<b>AED mode</b>	
Output Energy:	User configurable.
AED Shock Series:	Energy level for adult: 100 to 360 J, configurable Energy level for Infant/child: 10 to 100 J, configurable
	Shock series: 1, 2, 3, configurable
	Default configuration meets 2010 AHA Guidelines
<b>Shock Ready Time to the First Shock:</b> (Electrodes are connected to a patient at power on and initial rhythm finding is Shock Advised):	
	Less than 10 sec to 200 joules
	Less than 17 sec to 360 joules (Disposable battery for Public)
	Less than 10 sec to 360 joules (Rechargeable battery for Pro )
Sensitivity and Specificity:	Meets AAMI DF 80
<b>ECG Monitoring ( for Pro )</b>	
Lead Type:	3 leads ECG, PADS
Lead Selection:	I, II, III, Pads
<b>Heart Rate Display</b>	
Adult:	15 to 300 bpm
Pediatric:	15 to 350 bpm
Resolution:	1 bpm
Arrhythmia Alarms:	Asystole, Shockable Rhythm, Ventricular Tachycardia, Ventricular Bradycardia, Extreme Tachycardia, Extreme Bradycardia, PVCs Too High, Nonsus. Ventricular Tachycardia, Ventricular Rhythm, PNP, PNC, Tachycardia, Bradycardia, RUN, Couplet, Multiform PVC, R ON T, Bigeminy, Trigeminy, PVC, Irregular HR
ECG Size:	AUTO, 1.25 mm/mV (x0.125), 2.5 mm/mV(x0.25), 5 mm/mV(x0.5), 10 mm/mV(x1), 20 mm/mV(x2), 40 mm/mV(x4)
Sweep Speed:	25 mm/s
<b>Automated and User-activated Self-tests</b>	
Daily Auto Tests:	Test internal circuitry, energy charging/delivery system, pads, and battery capacity
<b>Battery-insert/User</b>	
Tests:	Upon battery insertion, extensive auto self-tests and user-interactive test check device readiness
Status Indicators:	Blinking green light indicates ready for use. Blinking red light indicates or/ and audible beep indicates need for maintenance

Mindray Building, Keji 12th Road South,  
High-tech Industrial Park, Nanshan, Shenzhen 518057, P.R. China  
Tel: +86 755 8188 8998 Fax: +86 755 26582680  
E-mail: intl-market@mindray.com www.mindray.com

**Mindray is listed on the NYSE under the symbol"MR"**

**mindray** BeneHeart are registered trademarks or trademarks owned by Shenzhen Mindray Bio-medical Electronics Co., LTD.  
© 2013 Shenzhen Mindray Bio-Medical Electronics Co., Ltd. All rights reserved. Specifications subject to changes without prior notice.  
P/N:ENG-BeneHeart D1 data-210285x2P-2013904



**mindray**

