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**Mindray Medical Netherlands B.V.**  
Drs.W.van Royenstraat 8, 3871 AN Hoevelaken, The Netherlands  
Voice: (31-33) 254-4911  
Fax: (31-33) 253-4280

**Mindray Medical Italy S.r.l.**  
Via Leonardo DA Vinci, 158, 20090 Trezzano Sul Naviglio (MI), Italy  
Voice: (39-02) 5737-401  
Fax: (39-02) 5523-2018

**Mindray Medical España S.L.**  
Avenida Manoteras 38, Edificio B, Bajo 8008. 28050-Madrid Spain  
Voice: (34-91) 392-3754  
Fax: (34-91) 392-3756

**Mindray Medical Germany GmbH**  
Goebelstrasse 21, 3. OG, 64293 Darmstadt  
Voice: (49 6151) 3910 0  
Fax: (49 6151) 3910 300

**Mindray (UK) Limited**  
Mindray House, Kingfisher Way, Hinchingsbrooke Business Park, Huntingdon, Cambs, PE29 6FN  
Voice: (44) 1480-416-840  
Fax: (44) 1480-436-588

**Mindray Medical France SARL**  
Europarc Creteil 1 allée des cerisiers 94000 CRETEIL, France  
Voice: (33-1) 4513-9150  
Fax: (33-1) 4513-9151

**Mindray Medical Rus Co.Ltd**  
2 Zvenigorodskaya Street, 13, bld 41, 123022 Moscow, Russia  
Voice: (7-499) 553-6036  
Fax: (7-499) 553-6039

**Mindray Medical Colombia S.A.S**  
Room No.702, Torre UNIKA,Carrera 9 No.77-67, Bogota, Colombia  
Voice: (57-1) 3130892 / 3210916

**Mindray do Brasil – Comércio e Distribuição de Equipamentos Médicos Ltda.**  
Rua Tavares Bastos, 329, Perdizes, São Paulo – SP, CEP 05012-020  
Voice: (55-11) 3124-8026  
Fax: (55-11) 3078-8035

**Mindray Medical Mexico S. de R.L. de C.V.**  
Félix Parra # 175 Colonia. San José Insurgentes Sur Delegación Benito Juárez 03900 México, D. F.  
Voice: (52-55) 5661-9450 / (52-55) 5662-6620  
Fax: (52-55) 5662-6597

**PT.Mindray Medical Indonesia**  
The East 11th Floor, Unit 08 Jl. Dr. Ide Anak Agung Gde Agung Kav. E 3.2 No.1 Jakarta 12950  
Voice: (6221) 2902-7280  
Fax: (6221) 2902-7283

**Mindray Medical Egypt**  
Ground Floor -11 El Imam Metwally El Sharawi Street, Sheraton Heliopolis - El Nozha, Cairo, Egypt  
Voice: (2) 02 22691047  
Fax: (2) 02 22691046

**Mindray Medical Australia**  
ADD: 19 Harker St, Burwood VIC 3125, Australia  
Voice: (61-3) 9830 6610  
Fax: (61-2) 9550 2841

**Mindray Medical Nigeria**  
ADD: 1004 Estate,Victoria Island, Lagos, Nigeria  
Voice: (+234) 7030682053

**Mindray Medical India Pvt. Ltd. (Delhi Office)**  
16th floor, Building No. 9-B, DLF Cyber City, DLF Phase- 3, Gurgaon- 122002, Haryana  
Voice: (91-124) 4632-488  
Fax: (91-124) 4632499

**Mindray Medical India Pvt. Ltd. (Mumbai office)**  
B-404, City Point, Andheri Kurla Road, Andheri East, Mumbai, 400 059, India  
Voice: (91-22) 4020-0000  
Fax: (91-22) 4020-0011

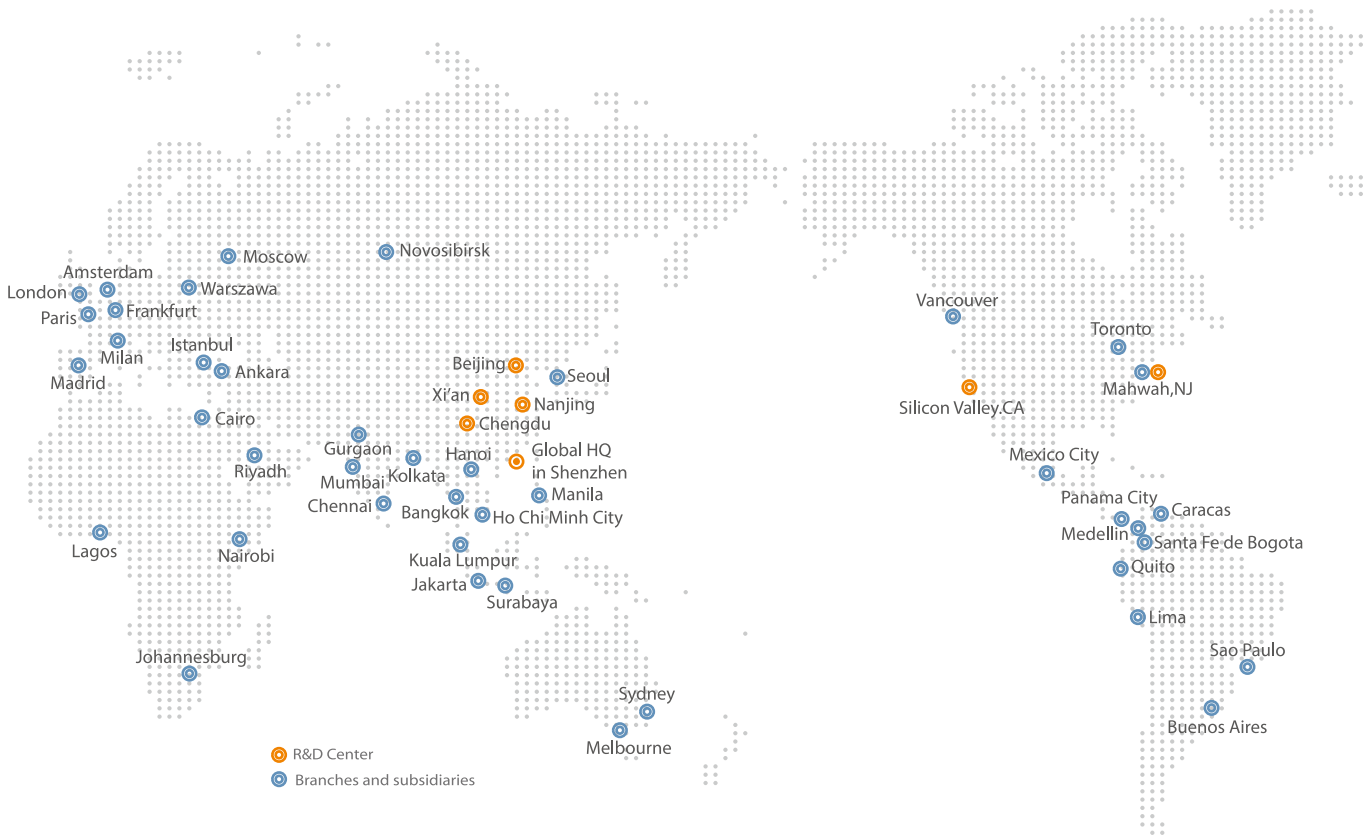
**Mindray Medikal Teknoloji Istanbul Ltd. Sti.**  
KÖYALTİ MEVKİİ 29 EKİM CAD.N.1 KUYUMCUKENT 2.NO.PLZ.3.KT. D.1- 9 34520 BAĞÇELİEVLER/YENİBOSNA, İSTANBUL, TÜRKİYE  
Voice: (90-212) 482 08 77  
Fax: (90-212) 482 08 78

**Mindray Medikal Teknoloji Istanbul Ltd. Sti. Branch Office Ankara**  
TURAN GÜNEŞ BULVARI ALEKSANDER DÜBÇEK CAD. NO:18/A ÇANKAYA/ANKARA, TÜRKİYE  
Voice: (90-312) 441 96 92  
Fax: (90-312) 441 96 93

**Mindray Medical Vietnam Co.,Ltd.**  
Unit 2, 4th Floor, "B" Building, Broadway Office Park, 102 Nguyen Luong Bang Blvd., Tan Phu Ward, Dist. 7, HCMC, Vietnam  
Voice: (84) 8 5413-6970  
Fax: (84) 8 5413-6971

**Mindray Medical Thailand Limited**  
1768 Thai summit Tower Room 407, 4th floor, New petchaburee Road, Kwaeng Bangkapi, Khet Huai Khwang, Bangkok 10320, Thailand  
Voice: (66) 2652-7288  
Fax: (66) 2652-7266

**Mindray Medical Korea**  
KNI Tower 9F 823-19 Yeoksam dong, Seoul-ganum, Korea  
Tel: 008225688040  
Fax: 008225688042



# 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 °C Storage: -30 to 70 °C
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 <sub>2</sub> , CO <sub>2</sub> and NIBP measurements set at an interval of 15 minutes.	
Wi-Fi is disabled	

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

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

	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
<b>Recorder</b>	
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
<b>Data Storage</b>	
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
<b>Defibrillator</b>	
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)
<b>Manual Mode</b>	
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
<b>AED Mode</b>	
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
<b>Noninvasive Pacing</b>	
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
<b>ECG Monitoring</b>	
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 <sub>2</sub> , NIBP
	Type BF: CO <sub>2</sub>
<b>Respiration</b>	
Method:	Trans-thoracic impedance
Range:	Adult: 0 to 200 rpm
	Pediatric, neonate: 0 to 200 rpm
Resolution:	1 rpm
<b>SpO<sub>2</sub>Pulse Oximetry</b>	
<b>Mindray SpO<sub>2</sub></b>	
Range:	0 to 100%
Resolution:	1%
PR Range:	20 to 300 bpm
<b>Nellcor SpO<sub>2</sub></b>	
Range:	1 to 100%
Resolution:	1%
PR Range:	20 to 300 bpm.
<b>NIBP</b>	
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
<b>CO<sub>2</sub></b>	
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