Carrying case

The carrying case adds a protection to the BeneHeart D6 and enables easy transport of well-organized accessories. Accessory pouches can be removed if desired.

Paddles

The external paddles quickly converted from adult to pediatric by removing the outer surface. Energy selecting, charging and shocking can be easily operated through the according buttons.

Pads

Multifunction defibrillator pads come in adult and pediatric to fit the needs of a variety of departments

Bed rail hook

The bed rail hook as a standard configuration makes the transport conviently.

Monitoring supplies

ECG cables and wires, NIBP cuffs, IBP cables, SpO_2 sensors, TEMP probes and $EtCO_2$ accessories are compatible with BeneView series patient monitors

BeneHeart™ D6

Defibrillator / Monitor

Technical Specifications

Physical

Dimensions: Without external paddles: 295mm (w) × 218 mm (d) × 279 mm (h)
With external paddles: 295 mm (w) × 218 mm (d) × 323 mm (h)

Weight :
Main unit: 6.6 kg (including ECG/ defibrillator/ pacing/ SpO_2/ 2 IBP/ 2 Temp/ Resp)
Battery package (each): 0.75 kg
External paddle sets: 0.83 kg

Environmental and Physical Requirements

Water Resistance: IPX4 (without external power)
Solids Resistance: IP3X
Temperature: Operating: 0 to 45 ºC (Microstream CO_2: 0 to 40 ºC; Sidestream CO_2: 5 to 35 ºC)
Storage: -20 to 60 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: 8.4 inch
Resolution: 800x600 pixels
Display Waveforms: Max. 4 channels.
Wave Viewing Time: Max. 16 s (ECG)

Power

AC Power
Line voltage: 100 to 240 VAC (±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: 4.5 Ah, 14.8 V, rechargeable lithium ion battery pack.
Number: Max. 2
Charge time: Less than 2 hours to 80% and less than 3 hours to 100% with device off.
Capacity Indicator: 5-segment led indicator for fast battery capacity evaluation
Capacity (Two new, fully charged battery):
Monitoring Mode: 10 hours, without recording.
Defib Mode: 200 times, 360 J discharge at intervals of 1 minute without recording.
Pacing Mode: 6 hours, 50 Ohm load impedance, Pacing rate: 80bpm, Pacing output: 60mA ,without recording.

Recorder

Method: High-resolution thermal dot array
Waveforms: Max. 3 channels
Speed: 25 mm/s, 50 mm/s
Paper width: 50 mm
Reports: The following can be recorded: Event Summary, Tabular Trends, Frozen Waveforms, Review, Operational Check and Configuration.
Auto Recording: Recorder can be configured to record marked events, charge, shock and alarms.

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 minu in total; max. 60 min for each patient
Data Export: Data can be export to PC through USB flash memory.

Defibrillator

Waveform: Biphasic truncated exponential waveform (BTE), with impedance compensation.
Energy accuracy: ±2 J or 15% of setting, whichever is greater, into 50 Ohm.
Charge Time: Less than 5 seconds to 200 Joules with a new, fully charged battery.
Less than 8 seconds to 360 Joules with a new, fully charged battery.
Shock Delivery: Via multifunction defib electrode pads, or paddles.
Patient Impedance Range: 20 to 200 Ohm (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 2005 AHA Guidelines.
Sensitivity and Specificity: Meets AAMI DF-80 .

Noninvasive Pacing

Waveform: Monophasic square wave pulse.
Pulse Width: 20 ms, ±5%.
Refractory period: 200 to 300 ms, ±3% (function of rate).
Pacing Mode: Demand or fixed.
Pacing rate: 40 ppm to 170 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 ,12 leads ECG, PADS/ PADDLES
Lead Selection: 3-lead: I, II, III
5-lead: I, II, III, aVR, aVL, aVF, V
12-lead: I, II, III, aVR, aVL, aVF, V1 to V6
Pads/Paddles
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(x0.25），5 mm/mV(x0.5），10 mm/mV(x1），20 mm/mV(x2），40 mm/mV(x4）
Sweep speed: 6.25 mm/s、12.5 mm/s、25 mm/s、50 mm/s
Patient Isolation (defibrillation proof):
Type CF: ECG, RESP, TEMP, SpO_2, NIBP, IBP;
Type BF: CO_2 and external defib.

Respiration

Technique: Trans-thoracic impedance.
Range: Adult: 0 to 120 rpm;
Pediatric, neonate: 0 to 150 rpm.
Resolution: 1 rpm.

SpO_2 Pulse Oximetry

Mindray SpO_2
Range: 0 to 100%.
Resolution: 1%.
PR Range: 20 to 254 bpm.
Masimo SpO_2
Range: 1 to 100%.
Resolution: 1%.
PR Range: 25 to 240 bpm.
Nellcor SpO_2
Range: 0 to 100%.
Resolution: 1%.
PR Range: 20 to 300 bpm.

Temperature

Parameter: T1, T2, TD.
Range: 0 to 50 °C (32 to 122 °F).
Resolution: 0.1 °C.

NIBP

Operating mode: Manual, Auto, STAT
Static pressure range: 0 to 300 mmHg
Displayed Pressures: Systolic, Diastolic, Mean
Initial Pressure: Adult: 160±5 mmHg
Pediatric: 140±5 mmHg
Neonate: 90 ± 5 mmHg

IBP

Channels: 2
Sensor Sensitivity: 5 uV/V/mmHg
Range: -50 to 300 mmHg
Resolution: 1 mmHg
PR Range: 25 to 350 bpm.
Waveform Label: Art, Ao, FAP, BAP, UAP, PA, CVP, CPP, LAP, RAP, ICP, P1, P2

CO_2

Microstream CO_2
Range: 0 to 99 mmHg
Sample flow rate: 50 ml/min
awRR Range: 0 to 150 rpm
Sidestream CO_2
Range: 0 to 99 mmHg
Sample flow rate: 70 or 100 ml/min.
awRR Range: 0 to 120 rpm.

DISTRIBUTOR:

P/N:ENG~BeneHeart D6~630285~20100125

mindray

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BeneHeart™ D6

Defibrillator / Monitor

mindray
healthcare within reach

BeneHeart™ D6

Defibrillator /Monitor

- 4-in-one design: monitoring, Manual Defib, AED, and Pacer
- Compact design, easy to carry and easy to operate
- 8.4' TFT display with 4 waveforms assures easy ECG and vital signs viewing
- Stands up to rugged use --- IP34 rating and impact test of 0.75m, suited for emergency care environments and out of hospital use
- Defibrillation, synchronized cardioversion and AED with Biphasic technology
- Quick charging in less than 5 seconds (200J)
- Escalating dose from 1J to 360J to Maximize defibrillation success
- Diagnostic-quality measurements and monitoring including 3/5-lead ECG, Mindray/ Masimo/ Nellcor SpO_2, NIBP, TEMP, RESP, IBP and Sidestream/ Microstream $EtCO_2$

4-in-one design

Manual Defib, AED and Pacer in one unit
Mode select intuitively
Defibrillation as easy as 1-2-3

AED

In AED mode, the defibrillator/monitor automatically analyzes the rhythm and determines whether a shock is advised. Voice and text prompts guide the user through the process. Voice recording is also available.

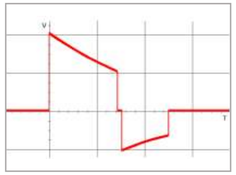
Non-invasive pacing

BeneHeart D6 offers demand mode and fixed mode non-invasive pacing with adjustable rates and output.

Multi-parameter monitoring

Diagnostic-quality measurements and monitoring including ECG, SpO_2, NIBP, TEMP, RESP, IBP and $EtCO_2$

Biphasic technology



Biphasic truncated exponential waveform (BTE), with impedance compensation. More effective with less energy and less hurt to heart.

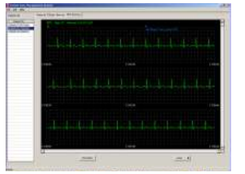
Data storage

100 patients' profiles
1000 events for each patient
24h consecutive ECG waveform storage
180 min voice recording

$EtCO_2$

Two options of Sidestream $EtCO_2$ and Microstream $EtCO_2$ to meet different clinical demands

Data management software



User can review patient data, events and ECG waveforms and edit the patient data on a PC through the Data Management software, as well as print out patient data.

Intelligent power system

Intelligent power system selects power source automatically. 2 Lithium ion batteries can support 10h-monitoring/ 200 shocks/ 6h-pacing.
The battery LED indicator displays capacity percentages.

Integrated thermal recorder

50mm integrated thermal recorder prints vital signs information and summary reports up to 3 waveforms