### Physical Specifications

#### Physical BeneVision N19

**Main Unit and Primary Display Installed Together with Handle**

**Dimension (horizontal):** 16.6" (H) x 20.0" (W) x 4.5" (D)

- 42.3 cm (H) x 50.9 cm (W) x 11.5 cm (D)

**Dimension (vertical):** 23.0" (H) x 13.7" (W) x 4.5" (D)

- 58.4 cm (H) x 34.8 cm (W) x 11.5 cm (D)

**Weight:** 22.7 lb (10.3 kg) including battery, iView module, WiFi module, display with handle and navigation knob

**Display, 19"**

- Dimension: 13.7" (H) x 20.0" (W) x 1.9" (D)

- 34.8 cm (H) x 50.9 cm (W) x 4.8 cm (D)

**Main Unit**

- Dimension: 10.5" (H) x 10.5" (W) x 2.7" (D)

- 26.8 cm (H) x 26.8 cm (W) x 6.8 cm (D)

- Weight: 7.5 lb (3.4 kg) including battery

#### Physical BeneVision N22

**Main Unit and Primary Display Installed Together**

**Dimension (horizontal):** 18.0" (H) x 22.3" (W) x 4.5" (D)

- 45.8 cm (H) x 56.6 cm (W) x 11.5 cm (D)

**Dimension (vertical):** 25.2" (H) x 15.0" (W) x 4.5" (D)

- 64.1 cm (H) x 38.3 cm (W) x 11.5 cm (D)

**Weight:** 25.3 lb (11.5 kg) including battery, iView module, WiFi module, display with handle and navigation knob

**Display, 22"**

- Dimension: 15.1" (H) x 22.3" (W) x 1.9" (D)

- 38.3 cm (H) x 56.6 cm (W) x 4.8 cm (D)

**Main Unit**

- Dimension: 10.5" (H) x 10.5" (W) x 2.7" (D)

- 26.8 cm (H) x 26.8 cm (W) x 6.8 cm (D)

- Weight: 7.5 lb (3.4 kg) including battery

---

### Electrical Ratings

- **Type of Protection:** Class I
- **Degree of Protection:** MPM/IBP/C.O./NMT/EEG module: CF
  - ScvO₂/CO₂/AG/rSO₂ module: BF

### Power Requirements

- **AC Voltage:** 100 to 240 VAC (±10 %)
- **Current:** 2.8 to 1.6 A
- **Frequency:** 50 Hz/60 Hz (±3 Hz)
- **Fuse:** Time-lag 250 V T4A

### Environmental Conditions

#### Operating Temperature

- **0°C to 40°C:** Main unit, MPM module, individual module of SpO₂, TEMP, IBP, CO, CCO/SvO₂, NMT, AG, and BeneLink, recorder

- **0°C to 40°C:** Microstream CO₂ module

- **5°C to 40°C:** Sidestream CO₂ module

- **10°C to 40°C:** AG module, ScvO₂ module

- **16°C to 32°C:** rSO₂ module

#### Storage Temperature

- **-20°C to 60°C:** Main unit, MPM module, individual module of SpO₂, TEMP, IBP, CO, CCO/SvO₂, ScvO₂, NMT, AG, Microstream/Sidestream CO₂, EEG, and BeneLink, recorder

- **-20°C to 70°C:** rSO₂ module

---

### Interfacing

- **Main Unit:**
  - 1 AC Power Connector
  - 2 RJ45 Network Connector, 100 Base-TX, IEEE 802.3
  - 6 USB 2.0 Connector
  - 3 Nonstandard USB SMR Connector
  - 1 VP Connector, VP1 for the secondary display
  - 1 BNC Connector
  - 1 Equipotential Grounding Terminal
  - 1 Multifunction Connector for Defib Sync and Analog Output

- **Modular iView:**
  - 4 USB 2.0 Connector
  - 1 RJ45 Network Connector, 100 Base-TX, IEEE 802.3

- **Barcode Scanner:**
  - Support 1D and 2D barcode

- **Keyboard and Mouse:**
  - Support wire and wireless type

- **Remote Control:**
  - Support

- **Network Printer:**
  - Support

### Battery

- **Type:** Rechargeable lithium-ion
- **Number of Battery:** 1
- **Capacity:** 5600 mAh, 11.3 VDC
- **Run Time:** >1 hr
  - When powered by a new fully-charged battery at 25 °C±5 °C with 12-lead ECG, Resp, SpO₂, 4-ch IBP, 2-ch Temp, CO₂, C.O. and NIBP measurements every 15 min, WiFi enabled, and screen brightness set to default 5
- **Recharge Time:** 5 hr to 90 % when the monitor is off
BeneVision N19/N22 PATIENT MONITORS

Physical Specifications

N19 Display Front (vertical)

13.7”
34.8 cm

23.0”
58.4 cm

N19 Display Side (vertical)

4.5”
11.5 cm

20.0”
50.8 cm

Main Unit Front

11.6”
29.4 cm

10.5”
26.6 cm

Main Unit Side

3.0”
7.5 cm

N22 Display Front (horizontal)

22.3”
56.6 cm

18.0”
45.8 cm

N22 Display Side (horizontal)

4.5”
11.5 cm

15.0”
38.2 cm
BeneVision N19/N22 PATIENT MONITORS

Physical Specifications

Mounting Solutions
Variable Height Mount (VHM)
Moment Load: 40 lbs (18.1 kg)

Pivot Arm Wall Mount
Moment Load: 60 lbs (27.2 kg)

Main Unit
Mounting Block
Moment Load: 1.1 lbs (0.5 kg)

SMR Wall Mount
Moment Load: 30 lbs (13.6 kg)

SMR Side

SMR Top

Lateral Range of Motion
Vertical Range of Motion: ±60°

Moment Load: 40 lbs (18.1 kg)

Moment Load: 60 lbs (27.2 kg)

Moment Load: 1.1 lbs (0.5 kg)

Moment Load: 30 lbs (13.6 kg)

©2019 Mindray DS USA, Inc.
Mindray® is a registered trademark of Shenzhen Mindray Bio-Medical Electronics Co., Ltd.
03/19 P/N: 0002-08-8115 Rev A