Mini-Torr Plus® Non-Invasive Blood Pressure Monitor

The BCI® Mini-Torr Plus® Non-Invasive Blood Pressure Monitor provides a reliable platform for your NIBP monitoring needs. It easily adapts to meet your departmental NIBP needs, with options ranging from a lightweight roll stand or IV pole mount, to a built-in printer, pulse oximetry and Welch Allyn™ SureTemp® temperature. Its combination of reliability and flexibility makes the Mini-Torr Plus® a practical starting point for your long-term NIBP monitoring needs.

For more information visit smiths-medical.com.
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Technical Specifications

DISPLAYS, INDICATORS AND KEYS
- **SpO₂ (Optional)**
  - 3-digit LED display, 0.40 inches (10.16 mm) high
- **Pulse Rate**
  - 3-digit LED display, 0.30 inches (7.62 mm) high
- **Pulse Strength**
  - Logarithmically scaled 10-segment LED bar graph
- **NIBP**
  - 3-digit LED display
  - Systolic and Diastolic Pressures – 0.40 inches (10.16 mm) high
  - Mean Arterial Pressure – 0.30 inches (7.62 mm) high
- **Temperature (Optional)**
  - 3-digit LED display – 0.40 inches (10.16 mm) high

**NIBP**
- **Range**
  - Adult: 20 to 250 mmHg
  - Neonate: 20 to 135 mmHg
- **NIBP Accuracy**
  - Meets SP10-1992 AAMI standard for NIBP accuracy
- **Cuff Pressure Accuracy**
  - ±3 mmHg or 2% (whichever is greater)
- **Determination Time**
  - 30 to 50 seconds typical (max. 120 seconds in adult mode, 90 seconds in neonate mode)
- **Interval Times**
  - 1, 2, 5, 10, 15, 20, 30, 45, 60, 90 mins
- **Calibration**
  - Factory calibrated
- **Inflation Pressure**
  - Adult: 50 to 285 mmHg
  - Neonate: 50 to 140 mmHg
- **Default Inflation Pressure**
  - Adult: 175 mmHg
  - Neonate: 100 mmHg
- **Alarm Range – Adult**
  - High: 15 to 285 mmHg and OFF (1 mmHg steps)
  - Low: 10 to 280 mmHg and OFF (1 mmHg steps)
- **Alarm Default – Adult**
  - Systolic: High – 200 mmHg; Low – 90 mmHg
  - Diastolic: High – 105 mmHg; Low – 40 mmHg
  - Mean Arterial: High – 140 mmHg;
  - Low – 50 mmHg
- **Alarm Default – Neonate**
  - Systolic: High – 120 mmHg; Low – 60 mmHg
  - Diastolic: High – 100 mmHg; Low – 40 mmHg
  - Mean Arterial: High – 110 mmHg;
  - Low – 50 mmHg

**PULSE RATE**
- **Range**
  - Adult: 30 to 180 bpm (NIBP)
  - Neonate: 40 to 180 bpm (NIBP)
  - 30 to 254 bpm (SpO₂)
- **Accuracy**
  - ±2%
- **Alarm Range – Adult and Neonate**
  - High: 30 to 250 bpm and OFF (1 bpm steps)
  - Low: 30 to 250 bpm and OFF (1 bpm steps)
- **Alarm Default – Adult**
  - High: 150 bpm
  - Low: 45 bpm
- **Alarm Default – Neonate**
  - High: 150 bpm
  - Low: 50 bpm

**SPO₂ (OPTIONAL)**
- **Range**
  - 0 to 100% SpO₂ (functional)
- **Accuracy**
  - ±2% counts at 70 to 100%; <70% unspecified
- **Averaging**
  - 8 beats
- **Pulse Tone**
  - Volume adjustable or OFF (pitch corresponds to SpO₂ value)
- **Alarm Range – Adult and Neonate**
  - High: 50 - 100% and OFF (1% steps)
  - Low: 50 - 99% and OFF (1% steps)
- **Alarm Default – Adult**
  - High: OFF
  - Low: 85%
- **Alarm Default – Neonate**
  - High: OFF
  - Low: 80%

**TEMPERATURE (OPTIONAL)**
- **Range**
  - 30°F to 108°F (–1°C to 42.2°C)
- **Accuracy**
  - ±0.2°F, ASTM E1112-86 (±0.1°C)
- **Calibration**
  - Factory calibrated

**DIMENSIONS**
- **Base Unit**
  - 3.24” H x 8.5” W x 5.5” D
  - 8.2 cm H x 21.6 cm W x 14.0 cm D
- **With Temperature**
  - 3.24” H x 10” W x 5.5” D
  - 8.2 cm H x 25.4 cm W x 14.0 cm D

**WEIGHT**
- **Base Unit**
  - 3.5 pounds [1.6 kg]
- **With Temperature**
  - 4.2 pounds [1.9 kg]

**AC CHARGER POWER REQUIREMENTS**
- 105 to 125 VAC, 60 Hz
- 90 to 110 VAC, 50 Hz (optional);
- 230 VAC, 50/60 Hz (optional)
- Output of 24VDC @ 1.5A with 4kV isolation

**BATTERY LIFE**
- Nickel Cadmium battery, 6 VDC, internal rechargeable, fully charged continuous-life
- 6 hours approximate, charge time of 4 hours

**SERIAL OUTPUT**
- **RS232C**
- **Data Format**
  - 19200 baud, 1 start bit, 8 data bits, 1 stop bit, no parity

**INTEGRATED PRINTER (OPTIONAL)**
- Text only, no graphics. Patient data log or trend tables.

**ENVIRONMENTAL**
- **Operating Temperature**
  - Base Unit: 32°F to 122°F [0°C to 50°C]
- **With Temperature**
  - 60.8°F to 104°F [16°C to 40°C]
- **Storage Temperature**
  - -40°F to 158°F [–40°C to 70°C]
- **Relative Humidity**
  - 10-95% (storage)
  - 15-95% (operating)

**STANDARDS**
- EN60601-1 [IEC60601-1], EN60601-1-1 [IEC60601-1-1], EN60601-1-2, [IEC60601-1-2]

**REGULATORY COMPLIANCE**
- ISO 9001/ISO 13485

**CATALOG NUMBER**
- 6004
- Mini-Torr Plus® NIBP Monitor

Information subject to change without notice. Please read the instructions for use supplied with the product for detailed instructions, warnings and cautions.

For more information, please call Smiths Medical PM, Inc., at 262-542-3100 or 800-558-2345, or your Smiths Medical distributor.

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