

SPECTRO₂™ | 20 Pulse Oximeter



Reliable results in challenging environments

Through the use of BCI® patented serial autocorrelation technology, the SPECTRO₂™ | 20 pulse oximeter delivers reliable spot-check results – *even in challenging clinical environments with the presence of low perfusion or motion.*

The SPECTRO₂™ | 20 oximeter aids health care providers in responding to a wide range of patient needs, including higher acuity care and ambulatory situations.

- Inter- and Intra-hospital transport
- Triage
- Patient tremors
- Unstable patients

With its unique features and optional accessories, the SPECTRO₂™ | 20 oximeter can be customized to address the needs of virtually any clinical setting.

For more information about the SPECTRO₂™ | 20 oximeter and its associated accessories, visit smiths-medical.com/bci.

PATIENT MONITORING

SPECTRO₂™ Pulse Oximeter Series –
Designed With You in Mind

SPECTRO₂ | 20 Pulse Oximeter Features

Reliable readings in a wide variety of challenging patient care situations

- Low perfusion performance
- Motion tolerance

PI (Pulse amplitude Index) Indicator

- Helps identify and maintain a good test site
- Enables confidence in results

One of the largest displays on the hand-held market

- At-a-glance patient assessment
- Easy to view from wide angles
- 50% larger LEDs than comparable hand-held devices

On-board sensor storage cradle

- Stores and protects sensor
- Reduces damage, minimizing unnecessary replacement costs
- Sensor is always ready and available

Versatility with multiple sensors

- Compatible with all BCI[®] sensors
- New BCI[®] 20-inch Spot-Check Sensor
 - Minimizes frustrating cable tangles
 - Quick, easy patient assessments
- Nellcor[®] sensor compatibility¹

¹ Tested with Nellcor[®] DS100A sensor.

Optional Accessories

• Docking Station

- Converts hand-held device to a table-top unit
- Allows for convenient storage
- Recharges device and an additional "back-up" Lithium Ion battery
- Modular style for attaching optional printer



Docking Station



Attachable Printer

• Attachable Printer

- Prints real-time, graphical and numerical trends



Power Options



Protective Rubber Gloves

• Power Options

- Disposable batteries
- AC power
- BCI[®] rechargeable Lithium Ion battery
- USB cable

• Protective Rubber Gloves

- Available in a range of colors

Technical Specifications

DISPLAYS AND INDICATORS

- Keys – ON/OFF button

SpO₂ (FUNCTIONAL)

- Range
 - 0 to 100% (1% increments); display maximum 99%
- Standard Accuracy
 - Adult / Ped $\pm 2 A_{rms}$ at 70 - 100%
 - Neonate¹ $\pm 3 A_{rms}$ at 70 - 100%
 - Less than 70% unspecified
- Low Perfusion Accuracy
 - Adult / Ped $\pm 2 A_{rms}$ at 70 - 100%
 - Neonate¹ $\pm 3 A_{rms}$ at 70 - 100%
 - Less than 70% unspecified
- Motion Accuracy²
 - Adult / Ped $\pm 3 A_{rms}$ at 70 - 100%
 - Less than 70% unspecified
- Averaging – 8 beats

PULSE SIGNAL STRENGTH

- Range
 - 0 to 9 indicator, indicates logarithmic strength of patient pulse
- Display – 9-segment red LED bargraph

¹With the BCI[®] 1302 Sensor.

²With the BCI[®] 1300 Sensor.

PULSE RATE

- Range – 20 - 300 bpm (1 bpm increments)
- Standard Accuracy – $\pm 2 A_{rms}$
- Low Perfusion Accuracy
 - $\pm 3 A_{rms}$ over 25 - 250 bpm range
 - Less than 70% unspecified [Pulse amplitude <1%. Tested using industry standard simulator.]
- Averaging – 8 seconds

PULSE AMPLITUDE INDEX

- Range – 0.03% - 20% (0.01% increments)
- Display – 9-segment green/yellow LED bargraph

POWER REQUIREMENTS

- Battery
 - 4 "AA" alkaline or custom 2-cell Lithium Ion rechargeable battery pack
- External (from AC Charger)
 - 9V, 3A output; input of 100-240 VAC, 50Hz, 60Hz
- External (from USB)
 - Input: 5V, 500mA max (USB powered source)
 - Output: 9V, 230mA max to oximeter

BATTERY LIFE

- Alkaline Cells Life – Approx. 26 hours of use
- Rechargeable Battery Life
 - Approx. 31 hours of continuous use (new)
 - Approx. 3 hours typical recharge time

TREND STORAGE

- Parameters
 - %SpO₂, Pulse Rate, Pulse amplitude Index and Relative Time
- Interval – 4 seconds
- Capacity – 144 hours at 4 second intervals

MEMORY – Stores data for up to 99 patients

ENVIRONMENT

- Operating Temperature
 - Oximeter and accessories: 0°C to 55°C (32°F to 130°F)
 - Power supply: 0°C to 40°C (32°F to 104°F)
 - Li+ battery charging: 5°C to 45°C (41°F to 113°F)
- Relative Humidity
 - Operating: 15 to 95% (non-condensing)
 - Storage: 10 to 95% (non-condensing)
- Altitude – Up to 10,000 ft.
- Shock and Vibration – Transport per ISO 9919

PHYSICAL

- Dimensions – 3.3W x 6.1H x 1.7D in
- Weight – 340g including four "AA" batteries

STANDARDS

EN60601-1, EN60601-1-2, ISO 9919

WARRANTY – 3 years

CATALOG NUMBER – WW1020

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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The products described are covered by the following U.S. Patent 5,558,096.

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