

# SPECTRO<sub>2</sub> | 20 Pulse Oximeter



## Reliable results in challenging environments

Through the use of BCI® patented serial autocorrelation technology, the SPECTRO<sub>2</sub> | 20 pulse oximeter delivers reliable spot-check results – *even in challenging clinical environments with the presence of low perfusion or motion.*

The SPECTRO<sub>2</sub> | 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 SPECTRO<sub>2</sub> | 20 oximeter can be customized to address the needs of virtually any clinical setting.

For more information about the SPECTRO<sub>2</sub> | 20 oximeter and its associated accessories, visit [smiths-medical.com/bci](http://smiths-medical.com/bci).

PATIENT MONITORING

SPECTRO<sub>2</sub> Pulse Oximeter Series –  
Designed With You in Mind

## SPECTRO<sub>2</sub> | 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<sup>®</sup> sensors
- New BCI<sup>®</sup> 20-inch Spot-Check Sensor
  - Minimizes frustrating cable tangles
  - Quick, easy patient assessments
- Nellcor<sup>®</sup> sensor compatibility<sup>1</sup>

<sup>1</sup> Tested with Nellcor<sup>®</sup> 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

### • Power Options

- Disposable batteries
- AC power
- BCI<sup>®</sup> rechargeable Lithium Ion battery
- USB cable



Protective Rubber Gloves

### • Protective Rubber Gloves

- Available in a range of colors

## Technical Specifications

### DISPLAYS AND INDICATORS

- **Keys** – ON/OFF button

### SpO<sub>2</sub> (FUNCTIONAL)

- **Range**  
0 to 100% (1% increments); display maximum 99%
- **Standard Accuracy**  
Adult / Ped  $\pm 2 A_{rms}$  at 70 - 100%  
Neonate<sup>1</sup>  $\pm 3 A_{rms}$  at 70 - 100%  
Less than 70% unspecified
- **Low Perfusion Accuracy**  
Adult / Ped  $\pm 2 A_{rms}$  at 70 - 100%  
Neonate<sup>1</sup>  $\pm 3 A_{rms}$  at 70 - 100%  
Less than 70% unspecified
- **Motion Accuracy<sup>2</sup>**  
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

<sup>1</sup>With the BCI<sup>®</sup> 1302 Sensor.

<sup>2</sup>With the BCI<sup>®</sup> 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**  
%SpO<sub>2</sub>, 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

PRODUCT(S) DESCRIBED MAY NOT BE LICENSED OR AVAILABLE FOR SALE IN CANADA AND OTHER COUNTRIES

Find your local contact information at: [www.smiths-medical.com/customer-support](http://www.smiths-medical.com/customer-support)

Smiths Medical is part of the global technology business Smiths Group plc. Please see the Instructions for Use/Operator's Manual for a complete listing of the indications, contraindications, warnings and precautions. SPECTRO<sub>2</sub>, BCI, and the BCI and Smiths Medical design marks are trademarks of Smiths Medical. The symbol ® indicates the trademark is registered in the U.S. Patent and Trademark Office and certain other countries. All other names and marks mentioned are the trademarks or service marks of their respective owners. ©2014 Smiths Medical. All rights reserved. PM195630EN-102014

To Order Call:

**AEDSuperstore<sup>®</sup>**

World's Largest Automated External Defibrillator Source

**800.544.0048**  
help@aeds.com

[www.AEDSuperstore.com](http://www.AEDSuperstore.com)

1800 US Hwy 51 N | Woodruff, WI 54568

MPAUC-1147

**Rx**  
**ONLY**

smiths medical