

# SPECTRO<sub>2</sub>™ | 30 Digital Pulse Oximeter



## Dependable results, plus the flexibility to perform in virtually any clinical setting

Utilizing BCI® patented technology, the SPECTRO<sub>2</sub>™ | 30 pulse oximeter can be trusted for dependable readings on a wide range of patients in the most challenging situations.

Includes multiple operating modes with audible and visual alarms and the ability to be alerted through a remote nurse call system to ensure patient safety.

The SPECTRO<sub>2</sub>™ | 30 oximeter enables healthcare providers to monitor for efficacy of respiratory treatments.

- At risk patients
- Sleep screening
- Post anesthesia recovery
- Analgesics monitoring

With its unique features and optional accessories, the SPECTRO<sub>2</sub>™ | 30 oximeter can be customized to address the needs in most clinical settings.

For more information about the SPECTRO<sub>2</sub>™ | 30 oximeter and its associated accessories, visit [smiths-medical.com/bci](http://smiths-medical.com/bci).

● Low Perfusion Performance

● Motion Tolerance

● Multiple Operating Modes

● Visual, Audible and Remote Alarms

PATIENT MONITORING

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

## SPECTRO<sup>2</sup> | 30 Pulse Oximeter Features

### Dependable readings for a wide range of patients in challenging situations

- Low perfusion performance and motion tolerance

### PI (Pulse amplitude Index) Indicator

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

### Versatility with multiple sensors

- Compatible with all BCI<sup>®</sup> sensors
- Nellcor<sup>®</sup> sensor compatibility<sup>1</sup>

### Visual, audible and remote alarms

- Alerts for potential clinical intervention
- Remote alarm operates through nurse call system

### 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 when not in use

### Programmable modes

- Clinician, home and sleep modes

<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

- Prints real-time, graphical and numerical trends



Attachable Printer

### • Power Options

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



Power Options

### • Protective Rubber Gloves

- Available in a range of colors



Protective Rubber Gloves

## Technical Specifications

### DISPLAYS AND INDICATORS

#### • Keys

5-button keypad for menu navigation and device configuration; ON/OFF button

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

#### • Range

0 to 100% (1% increments); display maximum 99%

#### • Standard Accuracy

Adult / Ped  $\pm 2$  A<sub>rms</sub> at 70 - 100%  
Neonate<sup>1</sup>  $\pm 3$  A<sub>rms</sub> at 70 - 100%  
Less than 70% unspecified

#### • Low Perfusion Accuracy

Adult / Ped  $\pm 2$  A<sub>rms</sub> at 70 - 100%  
Neonate<sup>1</sup>  $\pm 3$  A<sub>rms</sub> at 70 - 100%  
Less than 70% unspecified

#### • Motion Accuracy<sup>2</sup>

Adult / Ped  $\pm 3$  A<sub>rms</sub> at 70 - 100%  
Less than 70% unspecified

#### • Averaging

2 (Sleep Mode only); 4, 8, or 16 pulses (default = 8)

#### • Alarms

High: off and 99 - 51, 1 step (%SpO<sub>2</sub>) increments  
Low: 50 - 99, 1 step (%SpO<sub>2</sub>) increments

### 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<sub>rms</sub>
- **Low Perfusion Accuracy**  
 $\pm 3$  A<sub>rms</sub> over 25 - 250 bpm range  
Less than 70% unspecified (Pulse amplitude <1%. Tested using industry standard simulator.)
- **Averaging**  
8 or 16 seconds (default = 8); Sleep Mode = 8
- **Alarms**  
High: 300 - 21 bpm in 1 bpm increments  
Low: 20 - 299 bpm in 1 bpm increments

### 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 mains)**  
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. 17 hours of continuous use
- **Rechargeable Battery Life**  
Approx. 30 hours of continuous use (new);  
Approx. 3 hours typical recharge time

**MEMORY** – Stores data for up to 99 patients

### TREND STORAGE

- **Parameters**  
%SpO<sub>2</sub>, Pulse Rate, Pulse amplitude Index and absolute time from RTC
- **Interval**  
Selectable from 2 to 30 seconds in 1 second intervals (2, 3, 4, 5,... 30)
- **Capacity**  
72 hours of storage at 2 second intervals
- **External Connectors**  
Oximeter Sensor DB-9 Connector; Custom interconnect allowing connection for either USB communications, AC Mains Power input, or dock connection with or without printer

### 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** – WW1030

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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