SPECTRO $_2$|30 Digital Pulse Oximeter

- ● Low Perfusion Performance
- ● Motion Tolerance
- ● Multiple Operating Modes
- ● Visual, Audible and Remote Alarms

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

Utilizing BCI° patented technology, the SPECTRO $_2$|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 $_2$|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 $_2$|30 oximeter can be customized to address the needs in most clinical settings.

For more information about the SPECTRO $_2$|30 oximeter and its associated accessories, visit smiths-medical.com/bci.

PATIENT MONITORING

SPECTRO $_2$ Pulse Oximeter Series – Designed With You in Mind

BCI

SPECTRO $_2$|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 ® sensors
- Nellcor ® sensor compatibility [1]

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

[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

- Attachable Printer
  - Prints real-time, graphical and numerical trends

- Power Options
  - Disposable batteries
  - AC power
  - BCI ® rechargeable Lithium Ion battery
  - USB cable

- Protective Rubber Gloves
  - Available in a range of colors

Docking Station

Attachable Printer

Power Options

Protective Rubber Gloves

Technical Specifications

DISPLAYS AND INDICATORS
- Keys
  5-button keypad for menu navigation and device configuration; ON/OFF button

SpO$_2$ (FUNCTIONAL)
- Range
  0 to 100% (1% increments); display maximum 99%
- Standard Accuracy
  Adult / Ped ±2 A$_{rms}$ at 70 - 100%
  Neonate [1] ±3 A$_{rms}$ at 70 - 100%
  Less than 70% unspecified
- Low Perfusion Accuracy
  Adult / Ped ±2 A$_{rms}$ at 70 - 100%
  Neonate [1] ±3 A$_{rms}$ at 70 - 100%
  Less than 70% unspecified
- Motion Accuracy [2]
  Adult / Ped ±3 A$_{rms}$ 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$_2$) increments
  Low: 50 - 99, 1 step (%SpO$_2$) increments

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

[1] With the BCI ® 1302 Sensor.
[2] With the BCI ® 1300 Sensor.

PULSE RATE
- Range – 20 - 300 bpm (1 bpm increments)
- Standard Accuracy – ±2 A$_{rms}$
- Low Perfusion Accuracy
  ±3 A$_{rms}$ 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$_2$, 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