8500 Series
Handheld Pulse Oximeter

Time-tested performance you can trust.
The 8500 handheld pulse oximeter provides an easy and accurate assessment of oxygen saturation and pulse rate from adults to neonates. Truly portable, this pocket-size handheld oximeter will hold up in the most demanding environments. With 100 hours of battery life, the 8500 provides a cost-effective, environmentally friendly solution for your monitoring needs. The 8500M memory version offers 18 hours of data storage.
8500 Series

Be confident the 8500 Series will live up to its rugged and reliable reputation.
- Accuracy you can trust in most challenging conditions, such as motion and low perfusion.
- Built to last in the most demanding environments (certified for aeromedical use by the USAF)
- Superior three-year warranty
- Memory version (8500M) has powerful 18 hours of data storage
- Tricolor perfusion indicator provides immediate feedback to assess pulse quality

Select Your Options
- nVISION® Data Management Software – Windows®-based software provides seamless transfer of stored data for further analysis, report generation and storage (8500M)
- Serial to USB Adapter Data Transfer (Standard FTDI or Continua™ compliant PHDC protocol options)

Accessories
- Carrying Case – Maximizes portability
- Rubber Bumper – Provides additional protection
- Mounting Bracket – For wall or pole mount applications
- Stand – Increases flexibility of product positioning
- PureLight® Sensors – Available for a variety of placement sites
- PC Interface Cable – Download data (8500M)

Product Highlights
- Easy-to-Use
  3-button operation and bright LED displays
- Indication of Pulse Quality
  Tricolor perfusion indicator
- Reliable
  Proven Nonin digital pulse oximetry technology updated with latest software
- Outstanding Battery Life
  100 hours
- Durable
  Extremely rugged construction
- Choice
  Memory and non-memory versions

Specifications

Dimensions .......... 8 cm (3”) W x 15 cm (6”) H x 2.5 cm (1”) D
Weight ......................... 280 g (10 oz) with alkaline batteries
Memory (Optional) ....... 18 hours
Warranty ......................... 3 years
Oxygen Saturation Display Range ............... 0 – 100% SpO2
Pulse Rate Display Range ............... 18 – 321 beats per minute (BPM)

Saturation Declared Accuracy (Aav*) ............... 70 – 100%

<table>
<thead>
<tr>
<th>Adults/Pediatrics</th>
<th>Neonates</th>
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<tbody>
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Pulse Rate Declared Accuracy (Aav*) ............... 18 to 300 BPM

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Measurement Wavelengths and Output Power**
- Red ............... 660 nanometers @ 0.8 mW maximum average
- Infrared .......... 910 nanometers @ 1.2 mW maximum average

Indicators
- Pulse Quality Display ......................... LED, tricolor
- Numeric Displays ......................... 3-digit 7-segment LEDs, red

Temperature
- Operating ......................... -20 to +50°C (-4 to +122°F)
- Storage/Transportation ............ -30 to +50°C (-22 to +122°F)

Humidity
- Operating ......................... 10 – 90% noncondensing
- Storage/Transportation ............ 10 – 95% noncondensing

Altitude
- Operating ......................... Up to 12,000 meters (40,000 feet)
- Hyperbaric Pressure ......................... Up to 4 atmospheres

Power Requirements ........ Six 1.5V AA-size alkaline batteries.
- 100 hours maximum display brightness;
- 160 hours with normal brightness

Classifications per IEC 60601-1 / CSA601.1 / UL60601-1
- Type of Protection ......................... Internally powered (on battery power)
- Degree of Protection ......................... Type BF-Applied Part
- Mode of Operation ......................... Continuous
- Enclosure Degree of Ingress Protection ......................... IPX2

Sensor Families:
- Finger Clip Sensors: 8000AA-1, 8000AA-3, 8000AP-1, 8000AP-3
- Flex Sensors: 8000J-1, 8000J-3, 8008J, 8001J
- Soft Sensors: 8000SS, 8000SM, 8000SL
- Ear Clip Sensor: 8000Q2
- Forehead Sensor: 8000R, 8000H

* ±1 Aav represents approximately 68% of measurements.
** This information is especially useful for clinicians performing photodynamic therapy.

Specifications are subject to change without notice.