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

Product Highlights

- Easy to Use – 3-button operation and bright LED displays
- Indication of Pulse Quality – Tri-color perfusion indicator
- Reliable – Proven Nonin PureSAT® pulse oximetry technology
- Choice – Memory (18 hours) and non-memory versions
- Outstanding Battery Life – 100 hours
- Durable – Extremely rugged construction
- Superior – Three-year warranty

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)
- 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 for data transfer (Standard FTDI or Continua™ compliant PHDC protocol options)

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 – 400 BPM

Saturation Declared Accuracy (Aᵦᵣ)..............................

<table>
<thead>
<tr>
<th>Adults/Pediatrics</th>
<th>Neonates</th>
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<tbody>
<tr>
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<td>±2 digits</td>
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<tr>
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</tr>
<tr>
<td>Low Perfusion: Finger Clip</td>
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Pulse Rate Declared Accuracy

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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: 5x 1.5 V AA-size alkaline batteries.
100 hours maximum display brightness; 160 hours with normal brightness.

Classification per IEC 60601-1 / CSA601.1 / UL60601-1

Type of Protection: Internally powered (battery power)
Degree of Protection: Type BF-Applied Part
Mode of Operation: Continuous
Enclosure Degree of Ingress Protection: IPX2

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

Specifications are subject to change without notice.

Authorized Distributor:

Nonin Medical, Inc.
13700 1st Avenue North • Plymouth, MN • 55441-5443 • USA
P +1.763.553.9968  F 800.356.8874  F +1.763.577.5521
E info@nonin.com
www.nonin.com