

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)*



Specifications

Dimensions..... 8 cm (3") W x 15 cm (6") H x 2.5 cm (1") D
Weight280 g (10 oz) with alkaline batteries
Memory (Optional) 18 hours
Warranty.....3 years
Oxygen Saturation Display Range0 – 100% SpO₂
Pulse Rate Display Range 18 – 321 beats per minute (BPM)
Saturation Declared Accuracy (A_{ms}*) 70 – 100%

Adults/Pediatrics Neonates

| | | |
|--------------|-----------|-----------|
| Finger Clip: | ±2 digits | N/A |
| Flex: | ±3 digits | ±4 digits |
| Reflectance: | ±3 digits | N/A |

Pulse Rate Declared Accuracy (A_{ms}*) 18 to 300 BPM

Adults/Pediatrics Neonates

| | | |
|--------------|-----------|-----------|
| Finger Clip: | ±3 digits | N/A |
| Flex: | ±3 digits | ±3 digits |
| Reflectance: | ±3 digits | N/A |

Accuracy

Blood Oxygen Saturation (%SpO₂) (±1 S.D.)

| | | |
|----------------|--------------------|-------------------|
| No Motion: | Adults, Pediatrics | 70–100% ±2 digits |
| | Neonates | 70–100% ±3 digits |
| Motion: | Adults, Pediatrics | 70–100% ±3 digits |
| | Neonates | 70–100% ±4 digits |
| Low Perfusion: | Adults, Pediatrics | 70–100% ±3 digits |
| | Neonates | 70–100% ±4 digits |

Pulse Rate:

| | |
|----------------|----------------------|
| No Motion: | 18–300 bpm ±3 digits |
| Motion: | 40–240 bpm ±5 digits |
| Low Perfusion: | 40–240 bpm ±3 digits |

Measurement Wavelengths and Output Power**

Red660 nanometers @ 0.8 mW maximum average
 Infrared910 nanometers @ 1.2 mW maximum average

Indicators

Pulse Quality DisplayLED, tricolor
 Numeric Displays3-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

OperatingUp 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 ProtectionType BF-Applied Part
 Mode of Operation Continuous
 Enclosure Degree of Ingress ProtectionIPX2

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 A_{ms} represents approximately 68% of measurements.

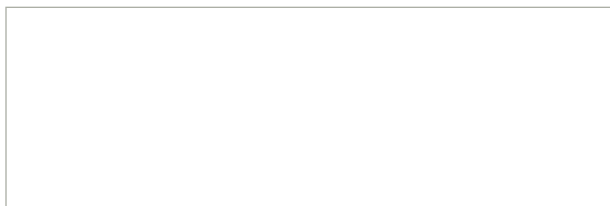
** This information is especially useful for clinicians performing photodynamic therapy.



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

Authorized Distributor:



Specifications are subject to change without notice.



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