

Instructions for Use

NoninConnect™ Model 3245 Pulse Oximeter with Bluetooth® Smart Technology

The NoninConnect Model 3245 Finger Pulse Oximeter measures and displays blood oxygen saturation (%SpO₂) and pulse rate. It is used for spot-checking on fingers that are between 0.8 – 2.5 cm (0.3 – 1.0 inch) thick.

NoninConnect is not a medical device and therefore does not require a prescription from a doctor.

Installing AAA Batteries

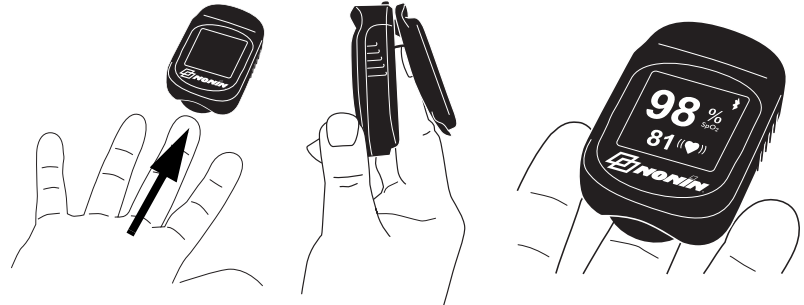
Before changing batteries, make sure the product is off and is not applied to a finger.



Follow local disposal and recycling laws for the NoninConnect and its components, including batteries.

Keep the oximeter away from young children. Small items such as the battery door and battery are choking hazards.

Turning On the NoninConnect



Symbols

Symbol	Description
	CorrectCheck™ – slide finger further into the NoninConnect.
	Percent oxygen in your blood.
	Pulse rate.
	Displays when NoninConnect is unable to detect a usable signal.
	White symbol – Radio is on. Green symbol – Connected. Flashing white symbol – Connection error. The radio will reset.
	Poor signal. NoninConnect may not work when circulation is reduced. Steady your hand, reposition finger, warm finger by rubbing, or select a different finger.
	Replace batteries.
	Battery orientation
SN	Serial Number
BDA	Bluetooth Device Address

Connection via Bluetooth Wireless Technology

Download the NoninConnect mobile app from the iTunes® store.

When NoninConnect is placed on the finger and turns on, it is ready for a Bluetooth wireless connection. NoninConnect stays in this mode until it is shut off. Refer to the Symbols table for the Bluetooth radio symbol descriptions.

Cleaning the NoninConnect Model 3245

- To clean, wipe the NoninConnect's surfaces with a soft cloth dampened with one of the following:
 - A 10% bleach solution (household bleach [5.25% sodium hypochlorite]).
 - Warm, soapy water (hand dishwashing detergent), and then rinse the cleaned surfaces with a soft cloth dampened with water.
- Dry with a soft cloth, or allow to air dry. Ensure that all surfaces are completely dry.

Caution: Do not place this product in liquid or clean it with agents containing ammonium chloride, isopropyl alcohol, or products that are not listed in these instructions.



Download the NoninConnect mobile app from the iTunes® store.

NoninConnect™ Model 3245 with NoninConnect App:

The NoninConnect Model 3245 *Bluetooth* pulse oximeter is designed to be used with the NoninConnect app, a free download from the Apple iTunes® store, and is compatible with the following Apple devices (running iOS 8.1 or later):

- iPhone® 4S and newer
- iPad® 3 and newer, all iPad Air®, and all iPad mini™
- iPod® Touch 5th edition and newer

The NoninConnect iOS app is not compatible with Windows® or Android® devices and operating systems.

Integrators, Software Developers, and Telehealth System

Providers: If you want to collect or save data from the NoninConnect Model 3245 to your medical system or custom-made software, contact Nonin Medical, Inc. at oem@nonin.com. You may qualify for direct pricing advantages depending on volume.

Integration and telehealth support is only available through Nonin; therefore, register with Nonin as soon as possible to receive support and important service notifications (e.g., product changes, common operating system connectivity information).

Contact Nonin for Support: oem@nonin.com or nonin.com/eHealth.

Warranty

Nonin warrants to the purchaser, for a period of 2 years from the date of purchase, each NoninConnect Model 3245 exclusive of the batteries and spring. Nonin shall repair or replace any NoninConnect found to be defective in accordance with this warranty, free of charge, for which Nonin has been notified by the purchaser by serial number that there is a defect, provided notification occurs within the applicable warranty period. If unable to repair, Nonin shall replace with a NoninConnect or a comparable product.

This warranty excludes cost of delivery to and from Nonin. Nonin reserves the right to charge a fee for a warranty repair request on any NoninConnect found to be within specifications. This product is a precision electronic instrument and must be repaired by Nonin Technical Service. Any sign or evidence of opening the NoninConnect, field service by non-Nonin personnel, tampering, or any kind of misuse of the product, shall void the warranty. The NoninConnect is warranted for consumer use only. All non-warranty work shall be done at Nonin's standard rates and charges in effect at the time of delivery to Nonin.

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Specifications

Oxygen Saturation Display Range: 0% to 100% SpO₂

Oxygen Saturation Declared Accuracy: 70% to 100% SpO₂ ±2 digits

Pulse Rate Display Range: 18 to 321 beats per minute (BPM)

Pulse Rate Declared Accuracy Range (A_{rms}): 20 to 250 BPM ±3 digits

Low Perfusion Pulse Rate Declared Accuracy Range (A_{rms}):
40 to 240 BPM ±3 digits

Temperature:

Operating: -5 °C to 40 °C / 23 °F to 104 °F

Storage/Transportation: -40 °C to 70 °C / -40 °F to 158 °F

Humidity:

Operating: 10% to 95% non-condensing

Storage/Transportation: 10% to 95% non-condensing

Altitude:

Operating: Up to 10,000 meters / 32,808 feet

Hyperbaric Pressure: Up to 4 atmospheres

Battery Life:

Operating: Approximately 2,200 spot checks (25 sec. per spot-check), within 10 meters/32 feet of collector with streaming data

Storage: 1 month, with batteries installed.

CAUTION: Remove batteries if the NoninConnect will be stored for more than 30 days.

Bluetooth Wireless Technology Information

Bluetooth Compliance: Version 4.0 single mode low energy

Operating Frequency: 2.4 to 2.4835 GHz

Output Power: TX: +3 dBm

Operating Range: 10 meter radius (line of sight)

Network Topology: Star - bus

Operation: Slave

NoninConnect

Antenna Type: Integrated chip type antenna

Modulation Type: Frequency Hopping Spread Spectrum

Data Rate: 1 Mbit/second

Data Latency: 6 ms

Data Integrity: Adaptive Frequency Hopping

24-bit CRC (cyclic redundancy check)

32-bit message integrity check

Data Format:

Sends data packets once per second. Includes a second counter that allows the host to detect if packets are missing and the NoninConnect to retransmit.

Quality of Service:

NoninConnect uses *Bluetooth* Smart technology for wireless communications, which allows for reliable communications in electrically noisy environments, and transmits physiological data once per second. If data is lost, NoninConnect will transmit data again one second later. If the connection is lost, NoninConnect will change the *Bluetooth* symbol from green to white and become available for a connection in a few seconds.

Bluetooth Profiles Supported: GATT-based proprietary Nonin profile

Authentication and Encryption: Supported

Encryption Key Size: 128 bits AES (advanced encryption standard)

The Bluetooth® word mark and logo are registered trademarks owned by Bluetooth SIG, Inc.

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U.S. Patents 5,490,523; 5,792,052; other patents pending.

10889-000-01

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