

Onyx II Fingertip Pulse Oximeter

Automatically sends results via Bluetooth to our LifeGuard SmartHome systems

With the increased need for remote disease management, the Onyx II, Model 9560 with Bluetooth wireless technology, provides a pulse oximetry monitoring solution that simplifies the exchange of secure information. It enables remote monitoring of patients with chronic diseases such as Chronic Obstructive Pulmonary Disease (COPD), Congestive Heart Failure (CHF) or Asthma.

Features

- Measurements can be sent automatically via Bluetooth to our LifeGuard SmartHome systems for monitoring by a nurse in our Emergency Response Centre
- SmartPoint Technology – algorithm determines when a high quality measurement is ready to be wirelessly transmitted and each measurement includes an indicator of quality
- Power Saver feature automatically adjusts transmitted power based on distance from the main unit - this allows for approximately 600 spot checks on 2 AAA batteries
- Extended range of up to 100m
- Bluetooth 2.0 Technology
- Store and Forward Memory

Specifications

- Oxygen Saturation Display Range: 0-100% SpO₂
- Pulse Rate Display Range: 18-321 beats per minute (BPM)
- Oxygen Saturation Declared Accurate Range (Arms^{*}): 70-100% SpO₂ ±2 digits
- Low Perfusion Oxygen Saturation Declared Accuracy Range (Arms^{*}): 70-100% SpO₂ ±2 digits
- Pulse Rate Declared Accuracy Range (Arms^{*}): 20-250 BPM ±3 digits
- Low Perfusion Pulse Rate Declared Accuracy Range (Arms^{*}): 40-240 ±3 digits
- This product complies with ISO 10993-1

Measurement Wavelengths and Output Power:[†]

- Red: 660 nanometres @ 0.8 mw maximum average
- Infrared: 910 nanometres @ 1.2 mw maximum average

Temperature:

- Operating: +41° to +104°F / 5° to +40°C
- Storage/Transportation: -40° to 158°F / -40° to +70°C



Humidity:

- Operating: 10-95% noncondensing
- Storage/Transportation: 10-95% noncondensing

Altitude:

- Operating: Up to 40,000 feet / 12,192 metres
- Hyperbaric Pressure: Up to 4 atmospheres

Battery Life:

- Operating: Approximately 600 spot checks
- Storage: 1 year, minimum

Antenna Type:

- L-shaped PWB ship-type antenna

Transmitter:

- Bluetooth Compliance: Version 2.0
- Operating Frequency: 2.4 - 2.4835 GHz
- Output Power: <20 dBm
- Operating Range: 100-meter radius indoors[‡]
- Network Topology: Star
- Operation: Bluetooth Slave
- Antenna Type: Internal
- Modulation Type: Gaussian Frequency Shift Keying

Frequency Hopping Spread Spectrum:

- Bandwidth: 1 MHz

Specifications subject to change at discretion of INS LifeGuard or the manufacturer, Nonin Medical, Inc.

^{*} ±1 Arms represents approximately 68% of measurements.

[†] This information is especially useful for clinicians performing photodynamic therapy

[‡] Line of sight when connected to a Class I device.