

Pulse Oximetry | Fingertip



9560 Onyx II



The Onyx® II, the most trusted name in fingertip pulse oximetry, is now integrated with Bluetooth Wireless Technology allowing patients to take vital signs anytime, anywhere.



Bluetooth® 2.0
Wireless Technology



Store & Forward
Memory



Extended Range
up to 100m



SmartPoint™
Technology



Power Saver



Patient Proof



NONIN

Right. When you need it.™

Oximetry Unplugged™ – Revolutionizing Disease Management



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. The integration of interoperable, Bluetooth wireless technology in health monitoring devices will allow patients, along with their clinicians, to more easily monitor vital signs in environments never before possible. As a result, patients will be able to go about their daily activities and send their vital data wirelessly through communication devices such as cell phones, PDAs and PCs, etc.

The benefits of this revolutionary product also include dramatic cost savings and reducing the strain put on over-crowded healthcare facilities. By working to streamline the monitoring/data sharing process, breakthrough devices such as the Onyx II 9560 enable clinicians to remotely monitor patients with chronic diseases such as Chronic Obstructive Pulmonary Disease (COPD), Congestive Heart Failure (CHF) or Asthma.



Onyx® II 9560 – A Closer Look



Bluetooth® 2.0 Technology

Engineered with Bluetooth 2.0 Wireless Technology, the Onyx II 9560 provides a secure wireless connection for vital information exchange. Extremely versatile, it easily connects to communication devices (cell phones, PDAs, PCs, etc.). More importantly, the 9560 is designed to meet the requirements of the emerging Bluetooth Health Device Profile (HDP), IEEE 11073 and Continua standards.



Store & Forward Memory

Ensures ultimate versatility by allowing patients to take readings when a wireless connection is not possible. When the patient returns into range, The Onyx II 9560 automatically transmits the time-stamped data. The Onyx II 9560's memory storage provides a minimum of 20 single point measurements.



SmartPoint™ Technology

SmartPoint Technology provides a fast and accurate snapshot of the patient's SpO₂ and pulse rate and eliminates the guesswork of determining which oximetry values to use for analysis. The SmartPoint algorithm automatically determines when a high quality measurement is ready to be wirelessly transmitted and each measurement includes an indicator of quality.



Clinically Proven Oximetry

Since 1995, Over One Million Onyx Devices Sold

The Nonin Onyx is the most widely used and trusted fingertip pulse oximeter by clinicians and patients worldwide. The Onyx is a proven performer with the widest range of patients from pediatric to adult, light to dark skin tones and good to low perfusion. The accuracy of Onyx fingertip oximeters is a result of Nonin Medical's superior PureSAT® signal processing technology that removes noise, artifact and/or interference that may affect readings — providing consistently accurate oximetry readings you can depend on.



Onyx®, The World's First Fingertip Pulse Oximeter

Revolutionary Onyx II, Model 9560



Onyx® II, Model 9560 - The World's First Bluetooth® Wireless Fingertip Pulse Oximeter

The Onyx II, Model 9560 with Bluetooth wireless technology is designed with our proven PureSAT® oximetry technology and delivers the trusted, precision accuracy of the entire Onyx line. And now with the advantage of wireless monitoring capabilities — the built to last and easy-to-use Onyx II 9560 provides unparalleled versatility for patient and clinician. Plus, with the addition of innovative new features such as Extended Range and Power Saver — it's ideal for home patient use.



Extended Range

The Onyx II 9560 provides an extended range of up to 100 meters (Class I) for added mobility and independence.



Patient Proof

Unmatched durability for the home care environment, we've made the Onyx II 9560 rugged to take a beating day after day. The most widely used fingertip oximeter comes with no wires or cables to hassle with, an automatic turn on/turn off, and is as convenient and easy-to-use as possible.



Power Saver™

Unlike traditional Bluetooth devices, the Onyx II 9560 has a new power saving feature that automatically adjusts transmitted power based on distance from the main unit. This unique feature allows for approximately 600 spot checks on 2 AAA batteries.

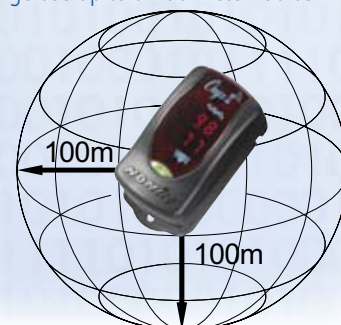
Why Bluetooth®

Bluetooth is a proven and widely accepted technology that provides freedom from wired connections. An automatic wireless connection provides fast, reliable and secure transmissions of data even when the devices are not in line-of-sight. Bluetooth uses a license-free, globally available frequency range in the Industrial Scientific Medical (ISM) band — to ensure communication compatibility worldwide.

Nonin products continue to revolutionize the way you look at pulse oximetry. With the integration of Bluetooth Wireless 2.0 Technology into the Onyx II 9560 Fingertip Pulse Oximeters, Nonin is the first to eliminate the wire between the patient and the display.

The choice of Bluetooth Wireless Technology also offers other advantages:

- ✓ Internationally accepted communication standard
- ✓ Ideal for short and long-range use up to a 100 meter radius
- ✓ Low power for long battery life
- ✓ Technology allows for compact design
- ✓ Reliable connections
- ✓ Data encryption feature to safeguard patient data





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Your Partner of Choice. With more than 20 years of experience and dedication to the design and support of noninvasive monitoring devices, NONIN has helped many medical professionals meet clinical and economic objectives. Trusted by clinicians worldwide, countless tests are performed every day using NONIN pulse oximeters in more than 125 countries. More than 90 OEM partners around the world also rely on NONIN’s digital technology to successfully integrate superior pulse oximetry and capnography into their products. NONIN’s dedication to technological leadership, precision manufacturing and uncompromised customer support ensures quality products and service you expect.

www.nonin.com

Specifications

Oxygen Saturation Display Range	0 – 100% SpO ₂
Pulse Rate Display Range	18 to 321 beats per minute (BPM)
Oxygen Saturation Declared Accuracy Range (A_{rms}*)	70 – 100% SpO ₂ ±2 digits
Low Perfusion Oxygen Saturation Declared Accuracy Range (A_{rms}*)	70 – 100% SpO ₂ ±2 digits
Pulse Rate Declared Accuracy Range (A_{rms}*)	20 – 250 BPM ±3 digits
Low Perfusion Pulse Rate Declared Accuracy Range (A_{rms}*)	40 – 240 ±3 digits
Measurement Wavelengths and Output Power**	
Red:	660 nanometers @ 0.8 mw maximum average
Infrared:	910 nanometers @ 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 meters
Hyperbaric Pressure:	Up to 4 atmospheres
Battery Life	
Operating:	Approximately 600 spot checks
Storage:	1 year, minimum

Antenna	Type:	L-shaped PWB whip-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 (GFSK)
Frequency Hopping Spread Spectrum	Band Width:	1 MHz

Classifications per IEC 60601-1 / CSA 601.1 / UL 60601-1

Degree of Protection:	Type BF-Applied Part
Enclosure Degree of Ingress Protection:	IP32
Mode of Operation:	Continuous

This product complies with ISO 10993-1.

*± 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.

Specifications are subject to change without notice.

