# NoninConnect™ Elite Model 3240

## *Bluetooth®* Smart Wireless Technology

### *Wireless Finger Pulse Oximeter*




℞ Only-US

Bluetooth® SMART

## Accuracy and Connectivity Paired with Proven Performance for Challenging Patient Conditions

Making the right decision for patients with respiratory conditions such as Chronic Obstructive Pulmonary Disease (COPD) is often dependent on getting an accurate oxygen saturation ($SpO_2$) reading. The NoninConnect™ Elite finger pulse oximeter can **enable clinicians to remotely (up to 10m, 32ft) view their patient's $SpO_2$ reading in real-time**. And patients can **send and save their $SpO_2$ history via an Apple® device**, which can aid in proactively identifying issues for early intervention and avoiding re-hospitalization.

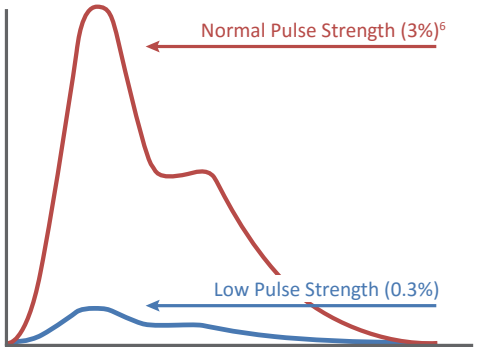
NONIN

Leaders in *Nonin*vasive Medical Monitoring

# NoninConnect Elite – for accuracy in patients with

## COPD patients often have co-morbidities resulting in a low pulse wave form

- Up to 27% of COPD patients may also have congestive heart failure (CHF).[1]
- Poor circulation is a symptom of CHF.[2]
- COPD patients with CHF often have low pulse strength and a small pulse wave form.




**NoninConnect is accurate in patients with as low as 0.3% pulse signal strength.[3]** A normal arterial pulse wave form showing the systolic peak is in red. NoninConnect can read pulse strength in patients with poor circulation (in blue) even when it is as low as 1/10th the strength of a normal wave form.

## Motion and labored breathing can challenge oximeter accuracy

- Motion and labored breathing can create noise artifact which distorts a small pulse wave form.
- The removal of noise artifact is crucial to an oximeter's ability to accurately assess $SpO_2$ in low perfusion/ pulse strength.

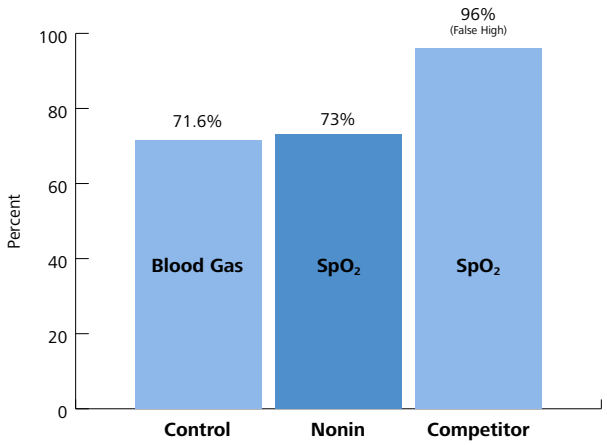
## Nonin PureSAT® technology provides proven accuracy

- Nonin Medical's clinically proven PureSAT technology utilizes intelligent pulse-by-pulse filtering to achieve its dependable, proven accuracy in low pulse strength.
- **Many low-cost oximeters can't accurately read through noise in a low-strength pulse.[3]**

## Proven accuracy during patient motion

In a study comparing accuracy in motion, Nonin and a competitor's finger pulse oximeter were tested during motion and compared to arterial blood gas samples.[4]

- Only Nonin's oximeter technology read accurately during patient motion.
- The competitor oximeter gave **false high** $SpO_2$ readings.
- The competitor was unable to consistently read during patient movement.




[1]PHC4-provided hospital discharges between Oct 1, 2007 and Sept 30, 2008. Pittsburgh Regional Health Initiative 2010.
[2]Mechanisms of Disease: Congestive Heart Failure. Loyola University Medical Education Network. http://www.meddean.luc.edu/lumen/meded/mech/cases/case4/chf.htm
[3]Nonin Medical, Inc. Data on file.
[4]Study conducted in a leading hypoxia research lab. Competitor finger pulse oximeter manufactured by Beijing Choice Electronic Technology Co., LTD. This test is a competitive comparison. Nonin Medical, Inc. Data on file.
[5]Control is Nellcor Tabletop Oximeter.
[6]Pleth Variability Index. Cannesson, M., British Journal of Anaesthesia, June 2, 2008.
[7]From ISO 80601-2-61:2011, Subclause 201.15.3.5.101.
[8]From IEC 60529:2013.

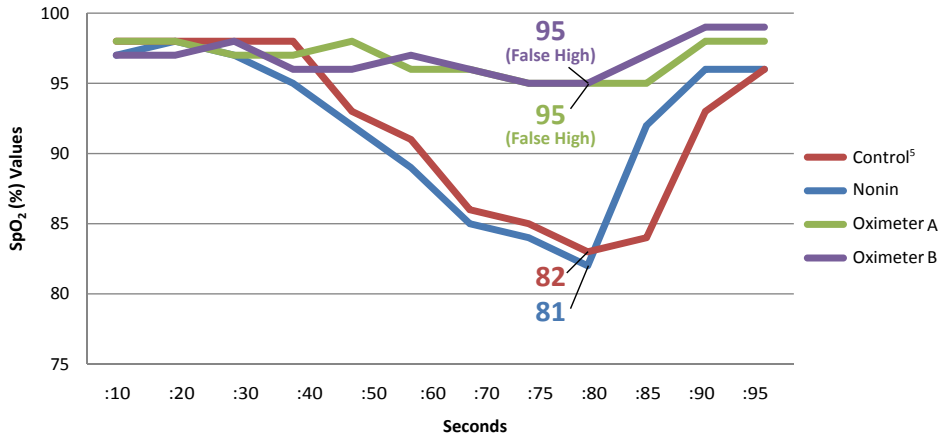
*Hazardous materials are defined in REACH and RoHS directives.

# complex co-morbidities

## Accuracy during desaturations

Only Nonin's finger oximeter was able to track the subject's desaturation.[3]

- Nonin PureSAT technology uses pulse-by-pulse filtering to provide accurate $SpO_2$ measurements.
- The leading competitors use measurement averaging across numerous pulses which can result in delayed or inaccurate readings during saturation changes.




- In the above comparison, Nonin was the only finger pulse oximeter to accurately track the subject's desaturation down to 81-82% and back up to 96% $SpO_2$. The two competitors registered changes of only 3% $SpO_2$.

# The Nonin Medical Advantage

- ✓ **Enables *clinicians* to remotely (up to 10m, 32ft) view their patients' $SpO_2$ in real-time on an Apple smart device**
- ✓ **Enables *patients and clinicians* to save their $SpO_2$ history (via email) using a compatible Apple smart phone or tablet**
- ✓ **NoninConnect app allows *patients* to share spot check readings with Apple's Health app**
- ✓ Can aid in proactively identifying issues for early intervention and avoiding re-hospitalization
- ✓ Provides simplified pairing for vital information exchange over a secure wireless connection
- ✓ Provides $SpO_2$ and pulse rate readings from small to large fingers, good to poor perfusion and dark to light skin tones
- ✓ Long battery life — up to 2,200 spot checks on two AAA batteries
- ✓ Withstands vibration, shock, bumps and drops that it will encounter in normal use[7]
- ✓ Protects the equipment inside the enclosure against harmful effects caused by entry of fluids, such as water drops[8]
- ✓ 2-year warranty
- ✓ RoHS and REACH compliant and environmentally friendly with regard to lead and certain hazardous materials



# NoninConnect Elite Compatibility

## Download the NoninConnect app to track and save $SpO_2$ readings via email

- Free app is available on the Apple® iTunes® Store.
- Simply place the NoninConnect Elite on your finger with your *Bluetooth* Smart device nearby (up to 10m, 32ft).
- $SpO_2$ readings will be sent to the *Bluetooth* Smart device and can be emailed as a CSV file or tracked with Apple's Health app.
- Apple devices compatible with NoninConnect Elite: iPhone 4S and newer, iPad 3 and newer, all iPad Air and iPad Minis, iPod Touch 5th edition and newer. Compatible with iOS 8.1 or newer.
- NoninConnect Elite is not compatible with Windows or Android devices or Apple iPad2 devices that use Bluetooth Classic.




## Specifications

**Dimensions** ..... 46mm (1.81") x 69mm (2.72") x 31mm (1.22")

**Weight** ..... 63 grams with batteries installed

**Warranty** ..... 2 years

**Oxygen Saturation Display Range** ..... 0 – 100% $SpO_2$

**Pulse Rate Display Range** ..... 18 – 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 BPM ±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 ..... -5° to +40°C (+23° to +104°F)
- Storage/Transportation ..... -40° to +70°C (-40° to +158°F)***

**Humidity**

- Operating ..... 10 – 95% relative humidity, non-condensing
- Storage/Transportation ..... 10 – 95% relative humidity, non-condensing (allow to stabilize)

**Altitude**

- Operating ..... Up to 12,192 meters (40,000 feet)
- Hyperbaric Pressure ..... Up to 4 atmospheres

**Internal Power**

- Battery ..... Two 1.5 volt AAA batteries
- Operating ..... 2200 spot-checks (25 sec/spot-check), within 10 feet from collector while in a connection
- Storage ..... 3 months****

**Bluetooth Information**

- Bluetooth Compliance ..... Version 4.0 single mode low energy
- Operating Frequency ..... 2.4 – 2.4835 GHz

Classifications per IEC 60601-1 / CAN/CSA-C22.2 No. 601.1 / UL 60601-1:

Degree of Protection ..... Type BF-Applied Part

Mode of Operation ..... Continuous

Enclosure Degree of Ingress Protection ..... IP32

**The NoninConnect Elite Model 3240 is RoHS compliant and environmentally friendly with no lead or hazardous materials. REACH compliant December 2012 revision.**

This product complies with ISO 10993-1, Biological evaluation of medical devices – Part 1: Evaluation and testing.

*±1 $A_{rms}$ represents approximately 68% of measurements.

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

*** When the oximeter is transferred from a non-operating temperature/humidity condition, allow one hour of stabilization to operating temperature/humidity specifications prior to use.

****If the device will not be used for 30 days or more, remove the batteries to prevent battery leakage.

Specifications are subject to change without notice.

Contact Regulatory@nonin.com for regulatory status.

Authorized Distributor:

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**Nonin Medical, Inc.**
13700 1st Avenue North
Plymouth, MN • 55441-5443 • U.S.A.
**Tel:** +1.763.553.9968 800.356.8874
**Fax:** +1.763.577.5521
**E-mail:** info@nonin.com

**Nonin Medical B.V.**
Prins Hendriklaan 26
1075 BD Amsterdam • Netherlands
**Tel:** +31 (0)13-79 99 040
**Fax:** +31 (0)13-79 99 042
**E-mail:** infointl@nonin.com

**nonin.com**

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