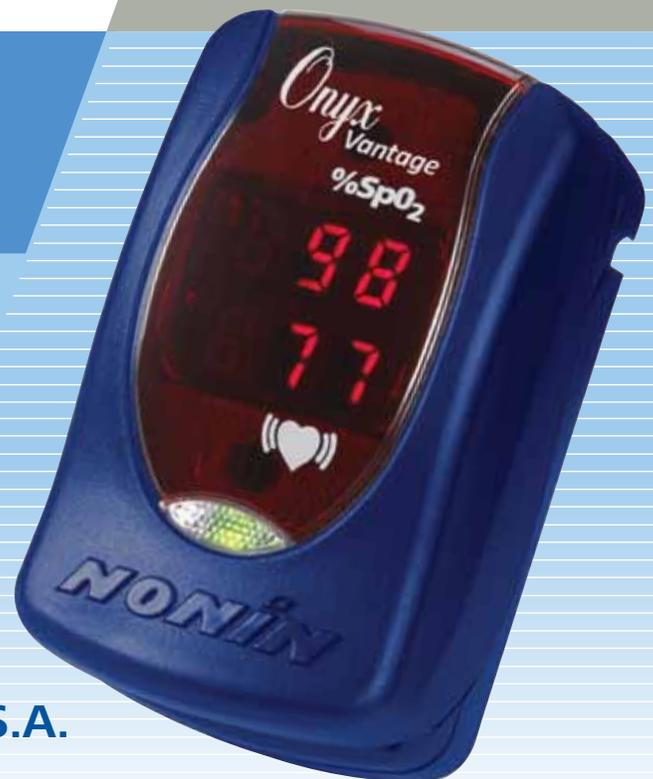


# Onyx<sup>®</sup> Vantage 9590

## *Finger Pulse Oximeter*



- ✓ Lead Free
- ✓ Latex Free
- ✓ Made in U.S.A.

### **Accuracy you can act on.**

When you need to make decisions quickly, you do not have time to question the accuracy of your finger pulse oximeter. You can trust Nonin Medical's Onyx<sup>®</sup> Vantage finger pulse oximeter with PureSAT<sup>®</sup> technology to quickly and accurately capture SpO<sub>2</sub> and pulse rate measurements — even on patients where low perfusion is a challenge. In fact, Onyx is the only finger pulse oximeter brand whose accuracy and performance claims are supported by published peer-reviewed, clinical studies. Accuracy matters, and Onyx Vantage provides accurate data for actionable decision making.

# Onyx® Vantage 9590

## Product Highlights

The Onyx is the only finger pulse oximeter with scientifically proven accuracy in the most challenging cases, including patients with low perfusion or dark skin tones.

- **Accurate** – Scientifically proven performance in the widest range of patient populations and settings
- **Durable** – Protects against dropping and water spills; allows for thousands of uses in the most demanding environments
- **Efficient** – Up to 6,000 spot checks or 36 hours of continual operation on two AAA batteries
- **Safe** – Built in the USA with lead-free and latex-free construction
- **Versatile** – One unit works on the widest range of patients from pediatric to larger adult patients
- **Warranted** – Industry-leading 4-year warranty
- **Cost Effective** – Proven accuracy, quality and durability make the Onyx Vantage a smart purchase for the long term



The Onyx Vantage is a valuable tool in any situation where a fast and accurate reading of blood oxygen saturation and pulse rates are needed. The Onyx Vantage finger pulse oximeter is intended for use by health professionals and features:

**Clinician-facing, easy-to-read, bright LED** – SpO<sub>2</sub> and pulse rate can be read from any angle, in all lighting conditions, day or night.

**Three-color pulse quality indicator LED** – Green, yellow or red light provides a quick assessment of patient pulse quality.

**Accuracy in the widest range of patients and conditions** – Only Nonin uses PureSAT® SpO<sub>2</sub> technology – an intelligent pulse-by-pulse filtering to provide accuracy in situations that are challenging such as light-to-dark skinned patients, good-to-low perfusion and more.

**One product for pediatric to adult patients** – Automatically adjusts to each patient from pediatric to adult quickly and accurately and accommodates a wide range of finger thicknesses: 8 mm to 25.4 mm (0.3" to 1.0").



**Proven durability** – Onyx Vantage is tough enough to withstand a minimum of 50 drops, is rugged enough to be used in the most demanding situations and exceeds IP32 water ingress testing.

**Automatic turn on and off** – No on/off button! Just insert finger for fast and easy spot checks. The auto-on/off mechanism allows two AAA batteries to provide up to 6,000 spot checks before being replaced!

**Portable** – Take the Onyx Vantage anywhere — it is lightweight and weighs less than two ounces.

**Available in four colors** – Black, Red, Blue and Purple. Complete with lanyard, instructions on CD and two AAA batteries. Optional carrying case and retractable lanyard available.



## Specifications

<b>Dimensions</b> .....	5.59 cm (2.2") L x 3.3 cm (1.3") W x 3.23 cm (1.27") H
<b>Warranty</b> .....	4 years
<b>Oxygen Saturation Display Range</b> .....	0 – 100% SpO <sub>2</sub>
<b>Pulse Rate Display Range</b> .....	18 – 321 beats per minute (BPM)
<b>Oxygen Saturation Declared Accuracy</b> <b>Range (A<sub>rms</sub>*)</b> .....	70 – 100% SpO <sub>2</sub> ±2 digits
<b>Low Perfusion Oxygen Saturation Declared Accuracy</b> <b>Accuracy Range (A<sub>rms</sub>*)</b> .....	70 – 100% SpO <sub>2</sub> ±2 digits
<b>Pulse Rate Declared Accuracy</b> <b>Range (A<sub>rms</sub>*)</b> .....	20 – 250 BPM ±3 digits
<b>Low Perfusion Pulse Rate Declared Accuracy</b> <b>Range (A<sub>rms</sub>*)</b> .....	40 – 240 BPM ±3 digits
<b>Measurement Wavelengths and Output Power**</b>	
Red .....	660 nanometers @ 0.8 mw maximum average
Infrared .....	910 nanometers @ 1.2 mw maximum average
<b>Temperature</b>	
Operating .....	-5° to +40°C (+23° to +104°F)
Storage/Transportation .....	-40° to +70°C (-40° to +158°F)
<b>Humidity</b>	
Operating .....	10 – 90% non-condensing
Storage/Transportation .....	10 – 95% non-condensing
<b>Altitude</b>	
Operating .....	Up to 12,192 meters (40,000 feet)
Hyperbaric Pressure .....	Up to 4 atmospheres
<b>Battery Life</b>	
Operating .....	Approximately 6,000 spot-checks or 36 hours of continuous operation using new AAA-size alkaline batteries
Storage .....	12 months

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

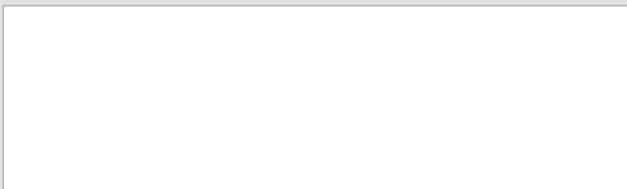
This product complies with ISO 10993-1, Biological evaluation of medical devices – Part 1: Evaluation and testing.

\*±1 A<sub>rms</sub> represents approximately 68% of measurements.

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

Specifications are subject to change without notice.

Authorized Distributor:



©2011 Nonin Medical, Inc. All trademarks are the property of Nonin Medical, Inc. unless otherwise noted. M-5211

**Nonin Medical, Inc.**  
13700 1st Avenue North  
Plymouth, MN ■ 55441-5443 ■ USA  
P +1.763.553.9968 TF 800.356.8874  
F +1.763.577.5521 E info@nonin.com

[www.onyxvantage.com](http://www.onyxvantage.com)

**Nonin Medical AB**  
Fibervägen 2, 82450  
Hudiksvall, Sweden  
P +46-(0)650 401500  
F +46-(0)650 401514  
E infointl@nonin.se

