Pulse Oximetry

Product Highlights

» Proven Accuracy & Durability
   Used by clinicians worldwide

» Simple
   Automatic on/off operation

» Cost Effective
   No additional sensors needed

» Versatile
   Accommodates widest range of finger sizes from pediatric to adult

» Efficient
   18 hours of continuous use; 1600 spot-checks

Pulse Oximetry at Your Fingertips, Anywhere, Anytime

NONIN revolutionized pulse oximetry with the Onyx. Hundreds of thousands of people trust Onyx, the first self-contained digital fingertip pulse oximeter. Incorporating the electronics and sensor into one unit – the Onyx provides a cost-effective solution for spot-checks and short-term monitoring. Unparalleled reliability and performance that’s easy and affordable.
The Onyx is ideal for use in any situation where a fast and accurate reading of blood oxygen saturation and pulse rate is needed. Never search for a pulse oximeter or sensor again.

Proven Performance
The portability and functionality of the Onyx makes it a valuable tool in any situation where a fast and accurate reading of blood oxygen saturation and pulse rate is needed.

Small & Lightweight
Carry the Onyx anywhere - on a lanyard, in a carrying case or in your pocket. It weighs less than 2 oz.

Large Bright LED Display
SpO₂ and Pulse Rate that can be read from any angle, day or night.

Pulse Quality Indicator
Brilliant, easy-to-see LED provides a quick and accurate assessment of patient readings.

Pediatric to Adult Finger Sizes
Accommodates a wide range of finger thicknesses, 0.3 - 1.0 inch (8 mm to 26 mm).

Automatic On/Off
Energy Efficient
Operates on two AAA alkaline batteries for approximately 1600 spot-checks or up to 18 hours of continuous operation.

Durable & Reliable
Rugged enough for use in the most demanding situations. The Onyx has the US Army and US Air Force aeromedical certification for use in helicopters.

Specifications
Dimensions: 1.4 cm (3.56”) W x 2.3 cm (5.84”) H x 1.28 cm (3.25”) D
Oxygen Saturation Display Range: 0-100% SpO₂
Pulse Rate Display Range: 18-231 BPM
Oxygen Saturation Declared Accuracy Range: (A_{\text{ref}})*: 70-100% SpO₂ ±2 digits
Low Perfusion Oxygen Saturation Declared Accuracy Range ( A_{\text{ref}})*: 70-100% SpO₂ ±2 digits
Pulse Rate Declared Accuracy Range ( A_{\text{ref}})*: 20-250 BPM ±3 digits
Low Perfusion Pulse Rate Declared Accuracy Range ( A_{\text{ref}})*: 20-250 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): +32° to +104°F / 0° to +40°C
Temperature (Storage/Transportation): -22° to +122°F / -30° to +50°C
Humidity (Operating): 10-90% non-condensing
Humidity (Storage/Transportation): 10-95% non-condensing
Altitude (Operating): Up to 40,000 feet / 12,192 meters
Altitude (Operating): Up to 4 atmospheres
Battery Life (Continuous): Approximately 1,600 spot-checks based on 18 hours of operation using two AAA-size alkaline batteries, calculated at 40 seconds per spot-check
Battery Life (Storage): 9 months typical, using two AAA-size alkaline batteries

Classifications per IEC 60601-1 / CSA 601.1/ UL 60601-1:
Degree of Protection: Type BF-Applied Part
Enclosure Degree of Ingress Protection: IPX2
Mode of Operation: Continuous

This product complies with ISO 10993-1
* e A_{\text{ref}} represents approximately 68% of measurements
**This information is especially useful for clinicians performing photodynamic therapy

Specifications are subject to change without notice.