



# CAPTURING ACCURATE PATIENT DATA IS VITAL

## NONIN® PULSE OXIMETRY

### WHAT IS PULSE OXIMETRY AND WHY DOES IT MATTER?

Pulse oximetry is a simple, noninvasive way to measure patient oxygen levels (SpO<sub>2</sub>) and heart rate. By measuring light absorption from a sensor—often placed on the finger, toe, or ear—pulse oximetry allows you to assess how effectively oxygen is transferred throughout the body and how frequently a patient's heart is beating.<sup>1,2</sup>

In higher acuity settings, pulse oximetry alerts you to abnormally low oxygen levels (hypoxemia) that can cause serious complications.<sup>1</sup> In primary care, pulse oximetry offers a quick and easy method for measuring oxygen saturation and heart rate.

### WHAT SHOULD YOU LOOK FOR IN AN SpO<sub>2</sub> SENSOR?

Several factors—including low perfusion, skin pigmentation, patient size and movement during an exam—can impact an SpO<sub>2</sub> reading. To help combat these challenges, look for a sensor that demonstrates clinical accuracy when compared to the pulse oximetry gold standard (invasive blood gas measurements).

For over three decades, Nonin Medical has specialized in dependable noninvasive monitoring devices.<sup>2</sup> In fact, Nonin is the global market leader in sleep testing oximetry.<sup>2</sup> Their SpO<sub>2</sub> sensors test well and include LED lights, consistent pulse detection and noise filtering.<sup>2</sup>

## WHAT MAKES NONIN® TECHNOLOGY DIFFERENT?

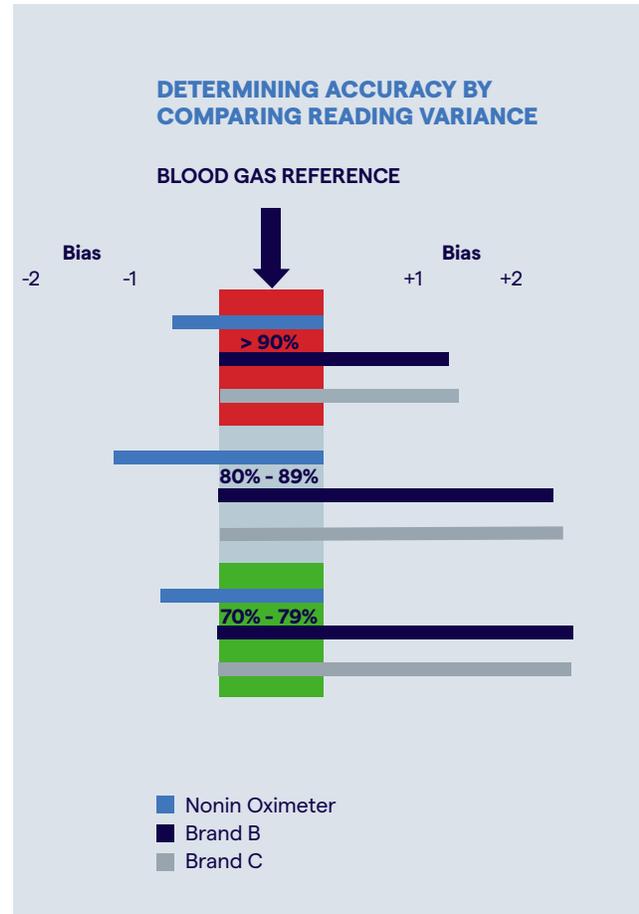
Nonin Medical's SpO<sub>2</sub> sensors incorporate special features designed to provide readings you can rely on.

- **PureLight® Sensors:** While all pulse oximeters use red and infrared light to measure oxygen saturation, Nonin PureLight sensors utilize high-quality LEDs and calibrated receptors to help eliminate interference.<sup>2,3</sup>
- **Pulse Detection:** Nonin's PureSAT® signal processing can help reduce false readings and alarms by locating a true pulse in low perfusion or when patient movement is present.
- **Low Perfusion Filters:** PureSAT technology also provides powerful noise filtering from weak or low perfusion signals to deliver reliable readings.

How are these special features tested? Noninvasive pulse oximeters are calibrated against invasive blood gas measurements taken from a sample of arterial blood (the gold standard for pulse oximetry). Based on a peer reviewed study comparing three leading oximetry technologies, Nonin sensors showed greater precision.<sup>2</sup>

Nonin's technology provided tighter variance and slightly lower bias than other readings, more closely aligning with the reference value.<sup>2</sup> Other technologies demonstrated a higher bias and greater inconsistencies.<sup>2</sup> And although Nonin readings may be slightly below the blood gas reference, this helps reduce the risk of high readings that can fail to identify clinical concerns.

When assessing patient monitoring solutions for your practice, make sure to select a device that incorporates reliable pulse oximetry for improved vital sign readings.



**Hillrom**<sup>TM</sup>

Contact your Hillrom representative for details about the new Welch Allyn® Spot Vital Signs® 4400 Device featuring Nonin SpO<sub>2</sub> technology.

[hillrom.com](https://www.hillrom.com)

<sup>1</sup> Jubran, Amal. "Pulse oximetry." Critical care (London, England) vol. 19,1 272. 16 Jul. 2015, doi:10.1186/s13054-015-0984-8.

<sup>2</sup> Nonin Medical "Nonin SpO<sub>2</sub> Technology" summary.

<sup>3</sup> Nonin Medical "Source to Durability" paper.

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