

# CAPTURING ACCURATE MEASUREMENTS

**A Guide to SpO<sub>2</sub> Sensor Placement**



# A Guide to SpO<sub>2</sub> Sensor Placement

When diagnosing and treating patients with severe upper respiratory illnesses, fast, accurate, and reliable SpO<sub>2</sub> measurements are critical. Accurate measurements ensure that patients who need advanced screening and care receive it promptly and prevents patients with healthy oxygen levels from undergoing unnecessary tests and treatments. Proper sensor placement is instrumental in delivering SpO<sub>2</sub> monitoring you can count on.

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# ABOUT SpO<sub>2</sub> SENSOR PLACEMENT

## Pulse Signal Quality

Nonin oximeters use pulse quality indicators (PQI) to communicate the quality of the pulse being used to measure patient SpO<sub>2</sub>.

### Pulse Quality Indicators:

-  Good Pulse Signal
-  Marginal Pulse Signal
-  Inadequate Pulse Signal

**If an oximeter is indicating a marginal or inadequate pulse signal, take the following steps to improve the signal quality and ensure accurate readings:**

- 1** Reposition sensor to ensure that finger or digit is properly positioned in sensor  
[Access Quick Guides and Videos for Nonin SpO<sub>2</sub> Sensor Application](#)
- 2** Reduce the patient's movement
- 3** If possible, improve circulation to sensor site
- 4** If using a handheld or table top device, try a different sensor

### Other factors that may affect signal quality:

- Sensor applied to same arm as a blood pressure cuff, arterial catheter, or intravenous line(s) (IVs)
- Excessive light, such as sunlight or direct home lighting
- Moisture in the device
- Finger is outside recommended size range
- Venous pulsations
- Anemia or low hemoglobin concentrations
- Cardiogram or other intravascular dyes
- Carboxy- or Methemoglobinemia
- Dysfunctional hemoglobin
- Artificial nails or dark nail polish
- Residue in the light path

# FINGERTIP OXIMETERS

## Onyx Vantage 9590

Click on the  to learn more.



## RELATED RESOURCES

Click on the links below to access additional resources:

1

[View Product Support](#)

2

[Learn More About Pulse Oximetry](#)

For other questions about the Onyx Vantage 9590, visit [www.nonin.com](http://www.nonin.com), contact Nonin customer service, or refer to your Operator's Manual.

# FINGERTIP OXIMETERS

## NoninConnect 3230

Click on the  to learn more.



## RELATED RESOURCES

Click on the links below to access additional resources:

**1** [View Product Support](#)

**2** [Access Quick Start Guide](#)

For other questions about the NoninConnect 3230, visit [www.nonin.com](http://www.nonin.com), contact Nonin customer service, or refer to your Operator's Manual.

# HANDHELD OXIMETERS

## Model 8500

Click on the  to learn more.



## RELATED RESOURCES

Click on the links below to access additional resources:

1

[View Product Support](#)

2

[Explore Compatible Sensors](#)

For other questions about the Model 8500, visit [www.nonin.com](http://www.nonin.com), contact Nonin customer service, or refer to your Operator's Manual.

# HANDHELD OXIMETERS

## PalmSAT 2500

Click on the  to learn more.



## RELATED RESOURCES

Click on the links below to access additional resources:

-  [View Product Support](#)
-  [Explore Compatible Sensors](#)

For other questions about the PalmSAT 2500, visit [www.nonin.com](http://www.nonin.com), contact Nonin customer service, or refer to your Operator's Manual.

# TABLETOP OXIMETERS

## Model 7500 & 7500FO

Click on the  to learn more.



## RELATED RESOURCES

Click on the links below to access additional resources:

-  [View Product Support](#)
-  [Explore Compatible Sensors](#)

For other questions about the Model 7500 and 7500FO, visit [www.nonin.com](http://www.nonin.com), contact Nonin customer service, or refer to your Operator's Manual.



# ADDITIONAL RESOURCES

Click on the product category buttons below to access additional product training resources.

SpO<sub>2</sub>  
Fingertips

SpO<sub>2</sub>  
Sensors

SpO<sub>2</sub>  
Handhelds

SpO<sub>2</sub>  
Tabletops

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