

# MightySat™ Rx Fingertip Pulse Oximeter

Featuring Masimo SET® Measure-through Motion and Low Perfusion™ Pulse Oximetry

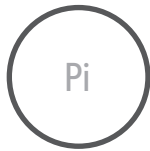
## Pulse Oximetry



Oxygen Saturation\*



Pulse Rate\*



Perfusion Index



Pleth Variability Index



Respiration Rate from the Pleth



\* Masimo SET® Measure-through Motion technology includes SpO2 and PR.

## Masimo SET®: The Choice of Leading Hospitals Worldwide

- > **Masimo SET®** overcomes the challenges of low perfusion and motion artifact that limit conventional pulse oximetry.
- > **Masimo SET®** pulse oximetry helps clinicians monitor more than 100 million patients a year.<sup>1</sup>

### Respiration Rate from the Pleth (RRp)

- > **RRp** may be used to measure respiration rate in the clinic, during emergency medical services, and at home.
- > **RRp** provides a wide measurement range of 4 to 70 breaths per minute.

### Designed for Performance

#### High Resolution Display

- Rotating and adjustable color screen for real-time display of all measurements

#### Plethysmographic Waveform

- Provides high-resolution display of the patient's pleth waveform

#### Touchpad

- Provides easy access to settings and device features

#### Durable, Lightweight Design

- For use in clinical and home-care environments



#### Signal I.Q.® (SIQ™)

- An indicator of the SpO2 measurement confidence

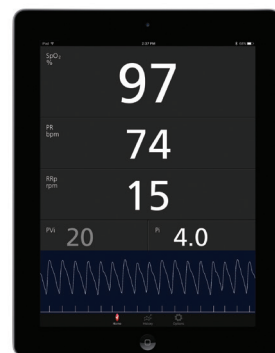


#### Flexible Pad

- Easily conforms to finger shape for enhanced comfort
- Enables secure application to finger to minimize external interference

### Free Downloadable Masimo Professional Health App<sup>2</sup>

Display parameter data on a compatible smart device with Bluetooth® LE enabled models. Measurements can also integrate into Apple's Health app.<sup>3</sup>



**VIEW** measurements on a compatible smart device<sup>2</sup>



**TREND** measurements over time, view graphically

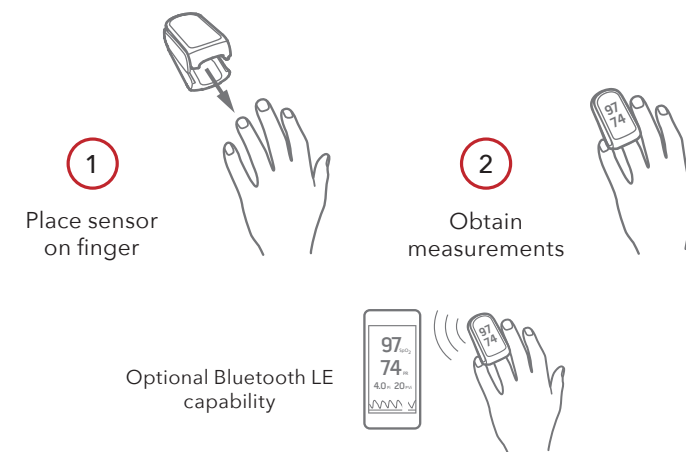


**SHARE** captured data via email

## Comparison at a Glance

	Masimo MightySat Rx	Nonin® Onyx® II 9560
<b>Key Product Features</b>		
Parameters: SpO2 and PR featuring Masimo Signal Extraction Technology® (SET®)	✓	No
Parameter: Perfusion Index (Pi)	✓	No
Parameter: Respiration Rate (RRp)	✓	No
Parameter: Pleth Variability Index (PVI)	✓	No
Pleth Waveform	✓	No
Rotating and adjustable color screen for real-time display of all measurements	✓	No
App includes: high-resolution pleth waveform, smart tone audible feature, and trending functionality	✓	No
Customizable settings with use of touchpad	✓	No

### Results in Two Easy Steps



Kit includes: MightySat Rx device, lanyard, batteries, and carrying case



## Unique Parameters and Indicators

### Signal I.Q. (SIQ)

Located under the plethysmographic waveform. The height of the vertical line provides an assessment of the confidence in the SpO2 value displayed.

### Plethysmographic (Pleth) Waveform

Real-time graphical representation of changes in volume of arterial blood with each pulse.

### Perfusion Index (Pi)

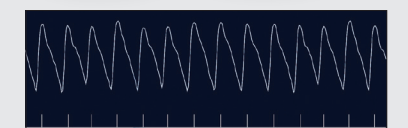
The ratio of the pulsatile blood flow to the non-pulsatile blood in peripheral tissue used to measure peripheral perfusion.

### Pleth Variability Index (PVI)

A measure of the dynamic changes in the perfusion index (Pi) that occur during the respiratory cycle.

### Respiration Rate from the Pleth (RRp)

A measure of respiration rate based on changes in the plethysmographic waveform. The unit of measure is respirations per minute (RPM).



High resolution view of the pleth waveform when viewed on a smart device.

# MightySat Rx Models

	MightySat Rx P/N 9709	MightySat Rx with Bluetooth LE P/N 9809	MightySat Rx with Bluetooth LE, RRP & PVI P/N 9909 P/N 9942	MightySat Rx with PVI & RRP P/N 9941
<b>Masimo SET<sup>®</sup> Measure-through Motion and Low Perfusion Technology</b>	•	•	•	•
<b>Measurements</b>				
SpO <sub>2</sub> (Oxygen Saturation)	•	•	•	•
PR (Pulse Rate)	•	•	•	•
Pi (Perfusion Index)	•	•	•	•
RRp (Respiration Rate)			•	•
PVi (Pleth Variability Index)			•	•
<b>Display</b>				
Pleth Waveform	•	•	•	•
150-Degree Viewing Angle	•	•	•	•
Rotational Screen	•	•	•	•
<b>Bluetooth LE</b>		•	•	
<b>Compatible with Masimo Professional Health App<sup>2</sup></b>		•	•	
<b>Four Year Limited Warranty</b>	•	•	•	•
<b>Device Color Available</b>	□	□	□ P/N 9909 ■ P/N 9942	■

# MightySat Rx Specifications

## DISPLAY RANGE

Functional Oxygen Saturation (SpO <sub>2</sub> )	0-100%
Pulse Rate (PR)	25-240 bpm
Perfusion Index (Pi)	0.02-20%
Respiration Rate (RRp)	4-70 rpm
Pleth Variability Index (PVI)	0-100%

## ACCURACY - (ARMS)<sup>4</sup>

Oxygen Saturation (%SpO <sub>2</sub> ) Accuracy Range	70-100%
No Motion	±2%
Motion	±3%
Low Perfusion	±2%
Pulse Rate (PR) Accuracy Range	25-240 bpm
No Motion	±3 bpm
Motion	±5 bpm
Low Perfusion	±3 bpm
Respiration Rate (RRp) Accuracy Range <sup>5</sup>	4-70 rpm
RRp	±3 rpm
RRp Mean Error*	±1 rpm

## PATIENT WEIGHT

Adult and Pediatric Patients	>30 kg (66 lbs)
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## MEASUREMENT RESOLUTION

Oxygen Saturation (%SpO <sub>2</sub> )	±1%
Pulse Rate (PR)	±1 bpm
Pleth Variability Index (PVI)	±1%
Respiration Rate (RRp)	±1 rpm

## ENVIRONMENTAL

Operating Temperature	5 to 40° C (41 to 104° F)
Storage Temperature	-40 to 70° C (-40 to 158° F)
Operating Humidity	10 to 95%, non-condensing
Atmospheric Pressure	540 to 1060 mBar

## PHYSICAL CHARACTERISTICS

Weight with Battery <sup>6</sup>	73 g (0.16 lbs)
Dimensions	7.4 cm x 4.1 cm x 3.0 cm (2.9" x 1.6" x 1.2")

## ALARMS

No alarms on this product

## CLASSIFICATION PER IEC 60601-1

EMC Classification	Class B
Degree of Protection	Type BF-Applied Part
Enclosure Degree of Ingress Protection	IP23
Mode of Operation	Continuous Operation

## COMPLIANCE

Safety	UL 60601-1, CSA C22.2 No. 601.1, IEC 60601-1, EN 60601-1
EMC	EN 60601-1-2, Class B
Pulse Oximeter	ISO 80601-2-61
Conformity to EU MDD 93/42/EEC	CE Marked

## BATTERY

Operating	Two 1.5 Volt AAA Batteries
Battery	Approximately 1800 spot-checks <sup>7</sup>

## COMMUNICATION

Radio Modes	Bluetooth LE
Communication Compliance	
Canada	IC: 7362A-MSAT01A RSS-210
Europe	EN 300 328 EN 302 489-17

<sup>1</sup> Estimate: Masimo data on file. <sup>2</sup> The app is downloadable from the App Store<sup>®</sup> for iOS devices or Google Play<sup>™</sup> store for select Android<sup>™</sup> devices. For an up-to-date list of compatible smart devices, see: www.masimo.com/professional-health/ <sup>3</sup> Apple is a registered trademark of Apple Inc. registered in the U.S. and other countries. <sup>4</sup> ARMS accuracy is a statistical calculation of the difference between device measurements and reference measurements. Approximately two-thirds of the device measurements fell within ± ARMS of the reference measurements in a controlled study. <sup>5</sup> RRp performance was validated across the entire range of 4-70 rpm through bench testing. <sup>6</sup> Weight is dependent on batteries used. <sup>7</sup> Based upon 15 hours of operation with screen brightness set to 50% and a spot-check of 30 seconds. \* RRp accuracy is presented with ARMS and mean error.

Caution: Federal (USA) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contraindications, warnings, and precautions.

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