

# Masimo Rad-5

## Signal Extraction Pulse Oximeter

### Masimo SET® Measure-through Motion and Low Perfusion™ pulse oximetry

A fully-featured hand-held pulse oximeter with the accuracy and reliability of Masimo SET, perfect for both continuous monitoring and spot-check applications. The Masimo SET technology is scientifically and clinically proven to provide accurate oximetry measurements during motion and low perfusion.

#### FEATURES

- › Lightweight, convenient handheld device with a long battery life—over 30 hours on 4 AA batteries
- › User configurable power up default settings
- › Sleep Mode allows clinicians to disable audio tones and LEDs
- › Up to 72 hours of trending memory
- › Perfusion Index (PI) indicates arterial pulse signal strength and may be used as a diagnostic tool during low perfusion
- › Signal I.Q. (SIQ) bar for signal identification and quality indication during motion and low signal to noise situations
- › FastSat tracks rapid changes in arterial O<sub>2</sub> with unmatched fidelity
- › SmartTone™ beeps in sync with pulse, even under patient motion conditions
- › Sensitivity options: APOD™, Normal and MAX
- › Audible and visual alarms for High/Low Saturation, Pulse Rate, Sensor Off and Low Battery
- › Optional protective boot cover with built in table-top stand



#### SPECIFICATIONS



**Weight:**  
13 oz (0.32kg)



**Dimensions:**  
6.2" x 3.0" x 1.4"  
(15.8cm x 7.6cm x 3.6cm)



**Battery Type:**  
4 AA Alkaline

**Battery Capacity:**  
over 30 hours



**SpO<sub>2</sub> Range:**  
1 - 100%

**Pulse Rate Range:**  
25 - 240 bpm

**Perfusion Range:**  
0.02% - 20%

**Data Display:**  
% SpO<sub>2</sub>, pulse rate, perfusion index, FastSat, alarm status, alarm silenced status, Signal IQ/pleth bar, battery status, MAX

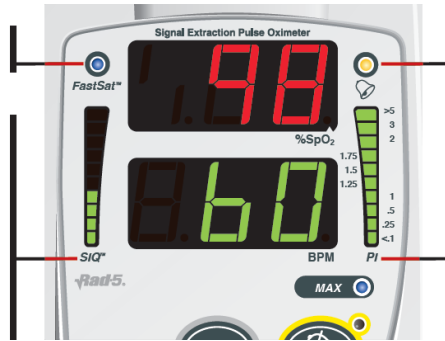
**Display Type:**  
LED

2573-2022-06-01

FastSat tracks rapid changes in arterial O<sub>2</sub>.

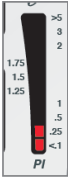


Signal I.Q. (SIQ) provides an assessment of the confidence in the displayed SpO<sub>2</sub> value. A vertical LED bar rises and falls with the pulse, where the height of the bar indicates the quality of the signal (left graphic).



The Alarm Status Indicator flashes when an alarm condition is present.

Perfusion Index (Pi) is an assessment of the pulsatile strength at a specific monitoring site (e.g. the hand, finger, or foot), and as such Pi is an indirect and noninvasive measure of peripheral perfusion. The LED bar is highest and green when the quality of the perfused site is best; when Pi is poor the LED bar is low and turns red (right graphic).



## Saturation Accuracy

### Saturation:

70% to 100%

### No Motion:

Adult, Pediatrics:  $\pm 2$  digits  
Neonates:  $\pm 3$  digits

### Motion:

Adult, Pediatrics:  $\pm 3$  digits  
Neonates:  $\pm 3$  digits

### Low Perfusion:

Adult, Pediatrics:  $\pm 2$  digits  
Neonates:  $\pm 3$  digits



*Protective boots are available in your choice of seven different colors*

## Pulse Rate Accuracy

### Pulse Rate:

25 - 240 bpm

### No Motion:

Adult, Pediatrics, Neonates:  
 $\pm 3$  digits

### Motion:

Adult, Pediatrics, Neonates:  
 $\pm 5$  digits

### Low Perfusion:

Adult, Pediatrics, Neonates:  
 $\pm 3$  digits

## Resolution

Saturation: 1%

Pulse Rate (bpm): 1 bpm

## Environmental

### Operating Temperature:

32°F to 122°F (0°C to 50°C)

### Storage Temperature:

-40°F to 158°F (-40°C to 70°C)

### Operating Humidity:

5% to 95%, non-condensing

### Operating Altitude:

500 mbar to 1060 mbar pressure  
-1000 ft to 18,000 ft  
(-304 m to 5,486 m)

## Alarms

Audible and visual alarms for high and low saturation and pulse rate (SpO<sub>2</sub> range 1% - 100%, pulse rate range 25 - 240 bpm)  
Sensor condition, system failure, and low battery alarms

### High Priority:

799 Hz tone, 5 pulse burst,  
pulse spacing: 0.250s, 0.250s,  
0.500s, 0.250s, repeat time: 10s

### Low Priority:

432 Hz tone, 3 pulses,  
repeat time: 5s

### Alarm Volume:

High Priority: 75 dB (max),  
Low Priority: 75 dB (max)