

# Rad-5<sup>®</sup>

A handheld pulse oximeter with Masimo SET<sup>®</sup> Measure-through Motion and Low Perfusion<sup>™</sup> pulse oximetry



- > In a study published in *Journal of Clinical Anesthesiology* comparing three pulse oximetry technologies, Masimo SET<sup>®</sup> demonstrated the highest sensitivity and specificity in identifying desaturation events during conditions of motion and low perfusion<sup>1</sup>
- > Lightweight, handheld device with user-configurable power up default settings
- > Sleep Mode allows clinicians to disable audio tones and dim LEDs
- > Up to 72 hours of trending memory
- > 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
- > Signal I.Q.<sup>®</sup> (SIQ) provides an assessment of the confidence in the displayed SpO<sub>2</sub> value
- > FastSat<sup>®</sup> tracks rapid changes in arterial O<sub>2</sub>
- > SmartTone beeps in sync with pulse, even under patient motion conditions
- > Sensitivity options: APOD<sup>®</sup>, Normal, and MAX
- > Audible and visual alarms for High/Low Saturation, Pulse Rate, Sensor Off, and Low Battery



## Features

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).



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

## Rad-5 Specifications

MEASUREMENT RANGE	PHYSICAL CHARACTERISTICS
SpO <sub>2</sub> ..... 1-100%	Dimensions ..... 6.2" x 3.0" x 1.4" (15.8 cm x 7.6 cm x 3.6 cm)
Pulse Rate ..... 25-240 bpm	Weight ..... 13 oz (0.32 kg)
Perfusion ..... 0.02-20%	
ACCURACY (ARMS) <sup>2</sup>	TRENDING
Saturation ..... 70-100%	Provides up to 72 hours of trending at 2 second resolution.
No Motion Adults/Pediatrics ..... 2%	Output to PC running Masimo TrendCom™ Utility
No Motion Neonates ..... 3%	MODES
Motion Adults/Pediatrics ..... 3%	Averaging Mode ..... 2, 4, 8, 10, 12, 14, or 16 seconds
Motion Neonates ..... 3%	Sensitivity ..... APOD, Normal, and Maximum
Low Perfusion Adults/Pediatrics ..... 2%	ALARMS
Low Perfusion Neonates ..... 3%	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)
Pulse Rate ..... 25-240 bpm	Sensor condition, system failure, and low battery alarms
No Motion ..... 3 bpm	High Priority ..... 799 Hz tone, 5 pulse burst, pulse spacing: 0.250s, 0.250s, 0.500s, 0.250s, repeat time: 10s
Motion ..... 5 bpm	Low Priority ..... 432 Hz tone, 3 pulses, repeat time: 5s
Low Perfusion ..... 3 bpm	Alarm Volume ..... High Priority: 75 dB (max), Low Priority: 75 dB (max)
RESOLUTION	DISPLAY/INDICATORS
Saturation (%SpO <sub>2</sub> ) ..... 1%	Data Display ..... % SpO <sub>2</sub> , pulse rate, perfusion index, FastSat, alarm status, alarm silenced status, Signal IQ/pleth bar, battery status, MAX
Pulse Rate (bpm) ..... 1 bpm	Type ..... LED
BATTERIES	COMPLIANCE
Type ..... 4 AA Alkaline	EMC Classification ..... IEC 60601-1 2, Class B
Capacity ..... over 30 hours	Equipment Classification ..... IEC 60601-1-1 / UL 60601-1
ENVIRONMENTAL	Type of Protection ..... Internally powered (on battery power)
Operating Temperature ..... 32°F to 122°F (0°C to 50°C)	Degree of Protection-Patient Cable ..... Type BF-Applied Part
Storage Temperature ..... -40°F to 158°F (-40°C to 70°C)	Rad-5 Mode of Operation ..... Continuous
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)	

<sup>1</sup> Shah et al. *J Clin Anesth.* 2012;24(5):385-91. <sup>2</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.

For professional use. See instructions for use for full prescribing information, including indications, contraindications, warnings, and precautions.

**Masimo U.S.**  
Tel: 1 877 4 Masimo  
info-america@masimo.com

**Masimo International**  
Tel: +41 32 720 1111  
info-international@masimo.com

