

# 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 SpO2 value
- > FastSat<sup>®</sup> tracks rapid changes in arterial O2
- > 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%	
Motion Adults/Pediatrics ..... 3%	MODES
Motion Neonates ..... 3%	Averaging Mode ..... 2, 4, 8, 10, 12, 14, or 16 seconds
Low Perfusion Adults/Pediatrics ..... 2%	Sensitivity ..... APOD, Normal, and Maximum
Low Perfusion Neonates ..... 3%	
Pulse Rate ..... 25-240 bpm	ALARMS
No Motion ..... 3 bpm	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)
Motion ..... 5 bpm	Sensor condition, system failure, and low battery alarms
Low Perfusion ..... 3 bpm	High Priority ..... 799 Hz tone, 5 pulse burst, pulse spacing: 0.250s, 0.250s, 0.500s, 0.250s, repeat time: 10s
RESOLUTION	Low Priority ..... 432 Hz tone, 3 pulses, repeat time: 5s
Saturation (%SpO <sub>2</sub> ) ..... 1%	Alarm Volume ..... High Priority: 75 dB (max), Low Priority: 75 dB (max)
Pulse Rate (bpm) ..... 1 bpm	
BATTERIES	DISPLAY/INDICATORS
Type ..... 4 AA Alkaline	Data Display ..... % SpO <sub>2</sub> , pulse rate, perfusion index, FastSat, alarm status, alarm silenced status, Signal IQ/pleth bar, battery status, MAX
Capacity ..... over 30 hours	Type ..... LED
ENVIRONMENTAL	COMPLIANCE
Operating Temperature ..... 32°F to 122°F (0°C to 50°C)	EMC Classification ..... IEC 60601-1 2, Class B
Storage Temperature ..... -40°F to 158°F (-40°C to 70°C)	Equipment Classification ..... IEC 60601-1-1 / UL 60601-1
Operating Humidity ..... 5% to 95%, non-condensing	Type of Protection ..... Internally powered (on battery power)
Operating Altitude ..... 500 mbar to 1060 mbar pressure	Degree of Protection - Patient Cable ..... Type BF-Applied Part
..... -1000 ft to 18,000 ft (-304 m to 5,486 m)	Rad-5 Mode of Operation ..... Continuous

<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.

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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