

Masimo Rad-8

Pulse Oximeter

Compact design. Unmatched clinical performance.

The Masimo Rad-8 has a compact design and unmatched clinical performance. The Rad-8 is proven to be accurate during motion and low perfusion in more than 100 independent and objective studies. With 95% accuracy without missing true clinical events, the Rad-8 has a reduced number of false alarms.

FEATURES

- › Featuring Masimo SET pulse oximetry, proven accurate during motion and low perfusion in more than 100 independent and objective studies
- › The accuracy of Masimo SET pulse oximetry has been shown to reduce false alarms by 95% without missing true clinical events
- › Simple, easy to use interface for quick setup and alarm management with one touch programming
- › Large LED color display is easy to read at a distance
- › Compact, lightweight design is ideal for acute and alternate care settings including long term care facilities, homecare and sleep labs
- › Sleep Mode easily configures system to perform bedside studies
- › 2 second averaging in sleep mode
- › Home Mode allows for safe and accurate monitoring and trending at home
- › RadNet® and RadLink® interface capability for multi-patient remote monitoring Perfusion Index (PI) indicates arterial pulse signal strength and may be used as a diagnostic tool during low perfusion
- › Low Signal IQ® (SIQ) indicator highlights conditions of low signal quality
- › FastSat™ tracks rapid changes in arterial $> O_2$ with high fidelity unlike any other pulse oximeter
- › APOD™ (Adaptive Probe Off Detection) offers the best probe off detection of Masimo's three sensitivity modes - APOD, Normal and MAX sensitivity
- › Adjustable averaging 2 to 16 seconds
- › Nurse call interface
- › Up to 7 hours of internal battery life when fully charged
- › 72 hours of trending memory
- › Available in horizontal and vertical configurations
- › Compatible with Philips Vuelink device interface module



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Performance & Ordering Information:

Performance Measurement Range

SpO ₂	1 – 100%
Pulse Rate	25 – 240 (bpm)
Perfusion Index	0.02% – 20%

Saturation Accuracy

Saturation	60% to 80%
No Motion ²	
Adults, Infants, Pediatrics	±4 digits
Saturation	70% to 100%
No Motion	
Adults, Pediatrics	±2 digits
Neonate	±3 digits
Motion ⁴	
Adults, Pediatrics	±3 digits
Neonate	±3 digits
Low Perfusion ⁵	
Adults, Pediatrics	±2 digits
Neonate	±3 digits

Pulse Rate Accuracy

Pulse Rate	25 – 240 bpm
No Motion	
Adults, Pediatrics, Neonate.....	±3 digits
Motion	
Adults, Pediatrics, Neonate.....	±5 digits
Low Perfusion	
Adults, Pediatrics, Neonate.....	±3 digits

Resolution

Saturation (%SpO ₂)	1%
Pulse Rate (bpm)	1 bpm

Electrical

AC Power requirements	100-240 VAC, 47-63 Hz
Power consumption.....	20 VA Max

Batteries

Handheld	
Type	Sealed lead acid
Capacity	up to 7 hours ⁶
Charging time	8 hours

Environmental

Operating Temperature	41°F to 104°F (5°C to 40°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)

Physical Characteristics

Dimensions.....	8.2" x 6.0" x 3.0" (20.8 cm x 15.2 cm x 7.6 cm)
Weight.....	2.1 lbs=.908 kg=32oz

Modes

Averaging mode ⁷	2, 4, 8,10, 12, 14 or 16 seconds
Sensitivity.....	APOD, Normal and Max ⁸

Alarms

Audible and visual alarms for high and low saturation (1% to 100%), pulse rate (25 - 240 bpm), sensor condition, system failure and low battery	
Alarm volume	High: 85dB (min) - Low: 45dB (min)

Display/Indicators

Data display	% SpO ₂ , alarm status, alarm silenced status AC power, Signal IQ/pleth bar, perfusion index bar, battery status, no sensor, sensor off
Type	LED

Compliance

Safety Standard for Medical Equipment	IEC 60601-1 2nd Edition UL 60601-1 CAN/CSA C22.2 No. 601-1 JIS 0601-1
Type of Protection...Class 1 (AC power) Internally powered (battery power)	
Degree of Protection-Patient Cable	Type BF, Defib Proof-Applied Part
Rad-8 Mode of Operation.....	Continuous
EMC Standard	EN60601-1-2, Class B

¹ Hay WW, Rodden DJ, Collins SM, Melera DL, Hale KA, Fashaw LM, Reliability of conventional and new oximetry in neonatal patients. Journal of Perinatology. 2002; 22:360-366. | ² The arterial oxygen saturation accuracy during no motion only applies to LNOP® Blue SpO₂ adhesive sensors | ³ De Felice et al. The pulse oximeter perfusion index as a predictor for high illness severity in neonates. Eu J Pediatr 2002; 161:561-562. | ⁴ Continuous rubbing and tapping motions at 2 to 4 Hz at an amplitude of 1 to 2 cm and continuous random frequency motion between 1 to 4 Hz at an amplitude of 2 to 3 cm. | ⁵ Pulse Amplitude >0.02% and % Transmission > 5%. | ⁶ When using a new, fully charged battery. | ⁷ With FastSat the averaging time is dependent on the input signal. For the 2 and 4 second settings the averaging time may range from 2-4 and 4-6 seconds, respectively. | ⁸ Maximum Sensitivity mode disables APOD, but maximizes measuring ability.