



Radical is the most advanced, yet flexible pulse oximeter in the world. In addition to being the most feature-packed, stand-alone pulse oximeter available, Radical can operate in two additional modes. The front module of Radical can be removed, creating a fully featured handheld pulse oximeter, ideal for transport. Radical can also be used to upgrade existing equipment through the sensor connector, thus not requiring additional hardware or software upgrades to improve the performance of your current multiparameter monitor to Masimo SET.

## Features

- Lightweight, ergonomic design.
- oximeter
- The Radical is a fully featured Handheld pulse oximeter
- The Radical interfaces to validated multiparameter patient monitors to replace the existing conventional pulse oximetry with Masimo SET pulse oximetry.
- Unprecedented specificity and sensitivity. Essentially eliminates false alarms and detects virtually all true alarms.
- Accurate during most patient movement, including shivering, combativeness, neonatal movement, and seizures.
- Accurate during low perfusion.
- Accurate during intense ambient light and resists electrocautery interference.



# Specifications

## Dimensions

Handheld: 8.9" x 3.3" x 2.1" (22.6 cm x 8.4cm x 5.3 cm)

Standalone: 3.5" x 10.5" x 7.7" (8.9 cm x 26.7cm x 19.6cm)

Weight - handheld: 1.3 lbs (0.59 kg)

Weight Docking station: (models RDS-1, RDS-2, and RDS-3): 2.5 lbs (1.14 kg);  
(model RDS-1B): 3.1 lbs (1.41 kg)

Weight - Standalone: (models RDS-1, RDS-2, and RDS-3):3.8 lbs(1.73 kg);  
(model RDS-1B):4.4 lbs (2.00 kg)

## Electrical Power

Standalone:

AC Power requirements: 100 - 240 VAC, 47 - 63 Hz

Power consumption: 55 VA

Fuses: 1 Amp, Fast Acting, Metric, (5 x 20mm), 250V

Batteries:

Handheld Type: NiMH

Capacity: hours6

Charging time: hours3

Standalone (Model RDS-1B only):

Type: NiMH

Capacity: 12 hours

Charging time: hours6

## Performance Measurement Range

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

Pulse Rate: 5-240 (BPM)

Perfusion: 0.02% - 20%

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

## Display / Indicator

Data display: %SpO<sub>2</sub>, pulse rate, pleth waveform, perfusion index, alarm status, trends, sensitivity, FastSat, Signal IQ.

Display color: Blue

Type: Backlit LCD

Pixels: 480 x 160 dots

Dot pitch: 0.25 mm

## Output Interface

Philips Vuelink, Spacelabs Universal Flexport, RadNet TM, (models RDS-1/1B,RDS-3)