

Radius VSM™

Patient-worn, Continuous Vital Signs Monitor (VSM)



POWERED BY TRUSTED MASIMO TECHNOLOGY

Acoustic Respiration Rate (RRa®)

- > Continuous Respiration Rate

Continuous Skin Temperature

- > Derives continuous measurements of skin temperature

Masimo ECG

- > Low noise continuous 6 waveform monitoring available (I, II, III, aVR, aVL, and aVF)
- > Lethal arrhythmia detection
- > Pacemaker pulse detection
- > Lightweight, adhesive, pre-connected electrode leadwire set
- > Respiration rate (impedance)

Patient Position and Activity

- > Continuous patient position turn monitoring and notifications
- > Patient posture and head-of-the-bed angle
- > Notifications of patient activity:
 - Upright (standing or sitting)
 - Walking
- > Fall detection



Masimo Noninvasive Blood Pressure (NIBP)

- > Measure on inflation
- > Automatic interval measurements
- > Designed to suppress noise
- > Worn on either arm
- > Disposable, single-patient-use cuffs

Radius VSM

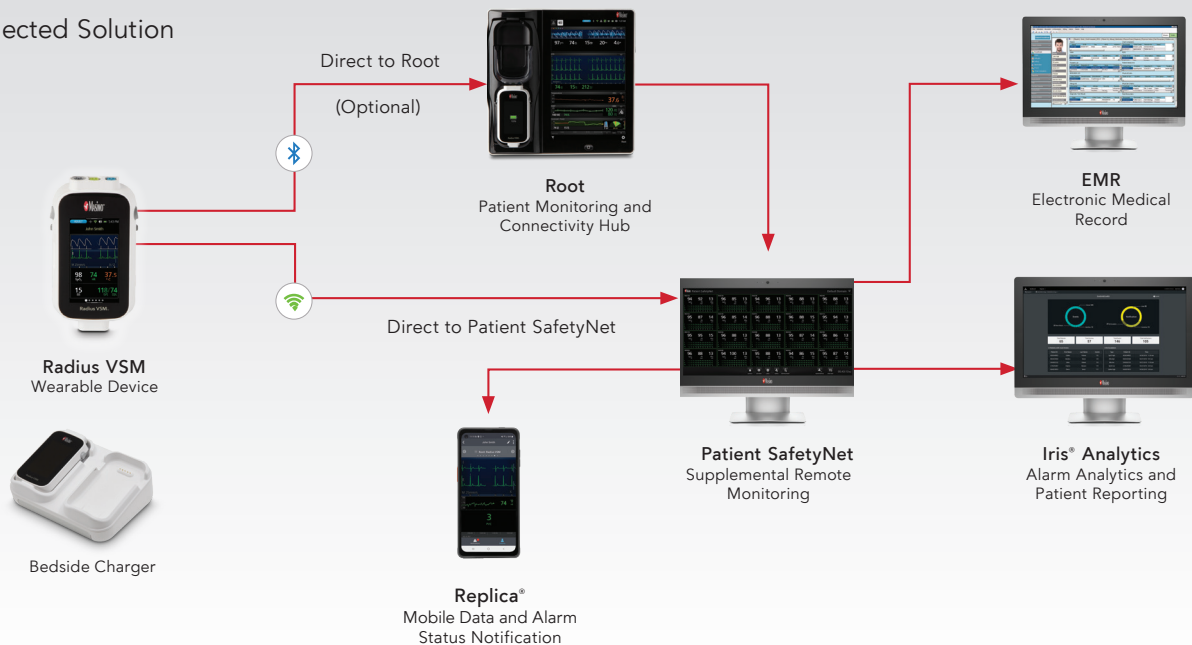
- > Wearable vital signs device
- > Up to 10 hours of battery life
- > 2.6" touchscreen
- > Full waveforms, trends
- > Audible and visual alarms
- > 96 hours of full parameter trend data storage
- > Withstands splashing water (IP24)
- > Wi-Fi connectivity to Patient SafetyNet™ *
- > Bluetooth® connectivity to Root®

Measure-through Motion and Low Perfusion™+ Pulse Oximetry

- > Masimo SET®
- > Oxygen Saturation (SpO2)
- > Pulse Rate (PR)
- > Perfusion Index (Pi)
- > Pleth Variability Index (PVi®)
- > Respiration Rate from Pleth (RRp®)

Radius VSM:

A Connected Solution



Radius VSM Device Specifications

Battery Life	Up to 10 hours ²	Alarm	Supports Alarms (visual & audible) complies IEC 60601-1-8
Device Weight	122g	Ingress Protection	IP24
Multifunctional Reusable Pod Weight	20g	Drop Test	Compliant with EN 60601-1, 3rd edition, Part 1, Clause 15.3.4.1, and IEC 60601-2-27, 201.15.3.4
Wi-Fi	Supports IEEE 802.11 a/b/g/n wireless standard		
Bluetooth	Supports version BLE 4.2		

Masimo SET[®] Specifications

Accuracy (ARMS ⁵)	SpO ₂ : 2% (no motion), 3% (motion), 2% (low perfusion) PR: 3bpm (no motion), 5 bpm (motion) RRp: 3 rpm, ± 1 rpm mean error
Recommended Sensors	RD SET CS-1, 1 ft. RD SET CS-2, 2 ft.
Connector Type	RD connector
Supported Parameters	SpO ₂ , PR, Pi, PVi, RRp

Masimo Noninvasive Blood Pressure (NIBP) Specifications

Blood Pressure Accuracy	Meets ANSI/AAMI SP10 and ISO 81060-2 (Mean difference of ≤ 5mmHg with a standard deviation of ≤ 8mmHg)
Diastolic Range	40–130 mmHg
Systolic Range	60–230 mmHg
Placement	Left or Right Upper Arm
Measurement Method	Oscillatory, Measure on inflation
Module Weight	111g

Patient Position and Activity Specifications

Incline Angle Measurement Range	-180° to 180°
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Continuous Skin Temperature Specifications

Clinical Accuracy	Measurement Range: 36°C to 42°C Bias: -0.2°C
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Acoustic Respiratory Rate Specifications

Accuracy (ARMS)	≤ 1 rpm (no motion)
Measurement Range	10-70 rpm (adults)

Masimo ECG Specifications

ECG Heart Rate Accuracy	ARMS ≤ 2 bpm or ARMS ≤ 1% (whichever is greater)	Pacer Detection	Detection Leads: I, II, and III (up to all three)
Heart Rate Measurement Range	15-300 bpm	Beat Classification	Normal Ventricular Paced
Lead Configuration (after HR accuracy)	6-waveform ECG (using 3 pre-connected lead wires)	ECG Waveform Display	Radius VSM Root Patient SafetyNet
Available Leads	I, II, III, aVR, aVL, aVF	Respiration Rate Accuracy	ARMS ≤ 1 bpm
Leads Analyzed	Single lead or multi-lead	Respiration Rate Measurement Range	4-120 rpm
Premature Ventricular Contractions (PVCs) Rate Display Range	0-99 PVCs/minute		
Rhythm/Rate Classification/Detection	Normal Sinus Rhythm, Bradycardia, Extreme Bradycardia, Tachycardia, Extreme Tachycardia, Atrial Fibrillation		
Lethal Arrhythmia Detection	Asystole, Ventricular Tachycardia, Ventricular Fibrillation		

Ordering Information

Radius VSM Device and Modules

Radius VSM Device, 1/box	9037
Radius VSM Bedside Charger	9040
Radius VSM Multi-Functional Reusable Pod	4888
Radius VSM NIBP Module	4889
Radius VSM Root Charger	4784

Ready-to-go Configuration Kit

Radius VSM Kit ⁶	9036
Kit Contents	2 Radius VSM Devices 1 Multi-functional Reusable Pod 1 NIBP Module

Sensors and Accessories

RD SET Adt CS-1, Adult Adhesive SpO ₂ Sensor, 20/box	4615
RD SET Neo CS-1, Neonatal/Adult Adhesive SpO ₂ Sensor, 20/box	4886
Radius VSM- ECG Electrode set, Adult 3-Leadwire, IEC, 20/Box	4695
Radius VSM Disposable NIBP Cuff, Small Adult, 20/box	4825
Radius VSM Disposable NIBP Cuff, Adult, 20/box	4826
Radius VSM Disposable NIBP Cuff, Large Adult, 20/box	4827
Radius VSM RAS-45 Acoustic Respiration Sensor, Adult, 10/Box	4828
Radius VSM Disposable Arm Band, Large, 20/box	301027
Radius VSM Disposable Arm Band, Medium, 20/box	301028
Radius VSM Disposable Arm Band, Small, 20/box	301029

* The use of the trademark Patient SafetyNet is under license from University HealthSystem Consortium. ¹ Masimo SET[®] Measure-through Motion technology includes SpO₂ and PR. ² The typical battery run time is 10 hours minimum with the following typical configuration: continuous Masimo SET[®], RRa, 6-Lead ECG measurements with skin temperature and posture orientation, display is off, Wi-Fi is on, periodic (4 times/hour) NIBP measurement, and no alarm or pulse tone is active. ³ ARMS accuracy is a statistical calculation of the difference between device measurements and reference measurements. Approximately two-thirds of the device measurement fell within ± ARMS of the reference measurements in a controlled study. ⁴ Kit does not include Root charger, sensors, cuffs, or accessories. Items must be ordered separately.