

O3[®] Regional Oximetry

Available for Adult, Pediatric, Infant, and Neonatal Applications



The O3 Regional Oximetry platform has been expanded to allow monitoring of infant and neonatal patients <10 kg.

- > O3 may help clinicians monitor cerebral and somatic oxygenation in situations in which peripheral pulse oximetry alone may not be fully indicative of the oxygen in the brain, and may provide an early indication of cerebral hypoxia or an adverse event.
- > O3 integrates with Masimo SET[®] pulse oximetry on Root[®], providing clinicians with expanded visibility of a patient's oxygenation status.
- > 3% ARMS^{*} trending accuracy specification on neonatal patients.
- > With its reduced size and flexible design, the O3 neonatal sensor easily conforms to and allows for ergonomic application on small foreheads.
- > O3 regional oximetry provides three measurements cleared for the monitoring of relative changes in oxygenated hemoglobin ($\Delta\text{O}_2\text{Hb}$), deoxygenated hemoglobin (ΔHHb), and total hemoglobin (ΔcHb) in adult brains, which may give additional insight into the reason for a desaturation event.



O3 Display

Δ base

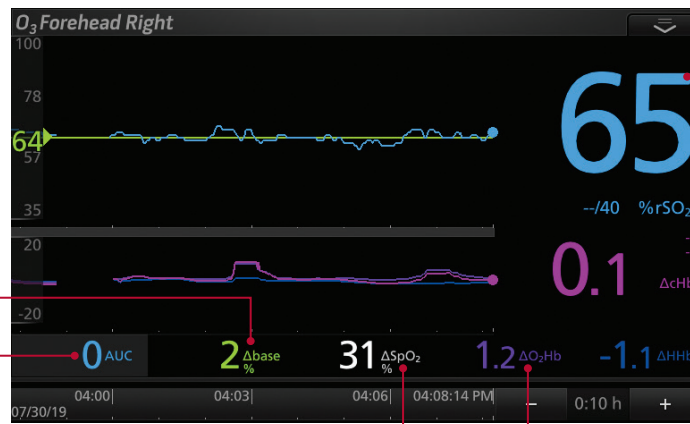
Displays the difference between current rSO₂ and user-defined baseline

AUC

Area Under the Curve index quantifies the depth and duration of patient-stay below user-defined rSO₂ low alarm limit

Δ SpO₂

Displays the difference between SpO₂ (from the Radical-7®, if applicable) and rSO₂



rSO₂
Tissue oxygen saturation

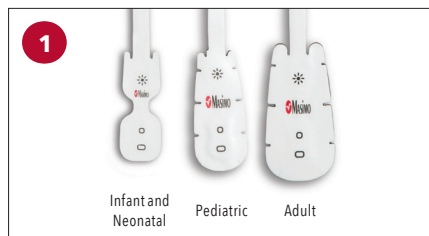
Δ cHb
Displays a measurement of the relative changes in total hemoglobin as a sum of Δ O₂Hb and Δ Hb

Δ Hb
Displays a measurement of the relative changes in deoxygenated hemoglobin

Δ O₂Hb
Displays a measurement of the relative changes in oxygenated hemoglobin

O3 Monitoring

The Root patient monitoring and connectivity hub offers plug-and-play monitoring with Masimo Open Connect® (MOC-9®) modules.*



Apply the appropriate O3 sensors to the forehead or somatic sites:

- > Infant and Neonatal Adhesive Sensor (<10 kg)
- > Pediatric Adhesive Sensor (≥5 kg and <40 kg)
- > Adult Adhesive Sensor (≥40 kg)



Connect the O3 sensors to an O3 MOC-9 module (up to two sensors per module).



Connect the O3 MOC-9 module to one of three MOC-9 ports on Root.

O3 MOC-9 Module Specifications

PHYSICAL CHARACTERISTICS	ENVIRONMENTAL
Length (including cable)..... 12.1 ft (3.7 m)	Operational Temperature..... 32 to 104° F (0 to 40° C)
Width..... 1.8 in (4.6 cm)	Storage Temperature..... -40 to 158° F (-40 to 70° C)
Thickness..... 0.6 in (1.5 cm)	Operating and Storage Humidity..... 10 to 95%, non-condensing
Weight..... 7.1 oz max (200 g max)	Altitude..... Up to 12,000 ft (3700 m)

O3 Sensor Specifications

	ENVIRONMENTAL
Application Site..... Forehead or somatic sites	Operating Temperature at Ambient Humidity..... 41 to 104° F (5 to 40° C)
Wavelengths..... 4	Storage Temperature at Ambient Humidity..... -40 to 140° F (-40 to 60° C)
Neonatal rSO₂ Sensor Accuracy (ARMS)* <10kg	Storage Humidity..... 15% to 95%, 86 to 140° F (30 to 60° C)
Trending Regional Oxygen Saturation (rSO ₂)..... 3%	
Pediatric rSO₂ Sensor Accuracy (ARMS)* ≥5 kg and <40 kg	
Absolute Regional Oxygen Saturation (rSO ₂)..... .5%	
Trending Regional Oxygen Saturation (rSO ₂)..... .3%	
Adult rSO₂ Sensor Accuracy (ARMS)* ≥40 kg	
Absolute Regional Oxygen Saturation (rSO ₂)..... .4%	
Trending Regional Oxygen Saturation (rSO ₂)..... .3%	

* 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.

* In countries with regulatory approval and Root devices with the correct software version.

The O3 System with infant and neonatal sensors is not licensed for sale in Canada.

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.

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

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

