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 oxygenation in situations in which peripheral pulse oximetry alone may not be fully indicative of the oxygen in the brain

> O3 integrates with Masimo SET® pulse oximetry on Root®, providing clinicians with expanded visibility of a patient's oxygenation status

> 3% ARMS[1] 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

Masimo

O3 Display

Δbase
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

ΔSpO2
Displays the difference between SpO2 (from the Radical-7®, if applicable) and rSO2

O₃ Forehead Right

rSO2
Tissue oxygen saturation

ΔcHbi
Displays an index representing the sum of the ΔO2Hbi and ΔHHbi components of the rSO2 calculation

ΔHHbi
Displays an index representing the change in the deoxyhemoglobin component of the rSO2 calculation

ΔO2Hbi
Displays an index representing the change in the oxyhemoglobin component of the rSO2 calculation

O3 Monitoring

The Root patient monitoring and connectivity hub offers plug-and-play monitoring with Masimo Open Connect® (MOC-9®) modules.*
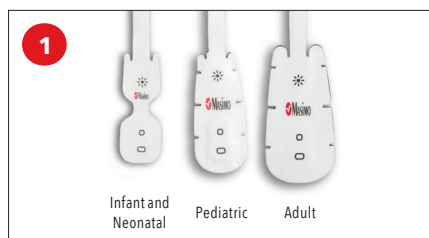
Apply the appropriate O3 sensors to the forehead:
> Infant and Neonatal Adhesive Sensor (<10 kg)
> Pediatric Adhesive Sensor (≥5 kg and <40 kg)
> Adult Adhesive Sensor (≥40 kg)

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	
Length (including cable)	12.1 ft (3.7 m)
Width	1.8 in (4.6 cm)
Thickness	0.6 in (1.5 cm)
Weight	7.1 oz max (200 g max)

ENVIRONMENTAL	
Operational Temperature	32 to 104° F (0 to 40° C)
Storage Temperature	-40 to 158° F (-40 to 70° C)
Operating and Storage Humidity	10 to 95%, non-condensing
Altitude	Up to 12,000 ft (3700 m)

O3 Sensor Specifications

Application Site	Forehead
Wavelengths	4
Neonatal rSO2 Sensor Accuracy (ARMS)[2]	<10kg
Trending Regional Oxygen Saturation (rSO2)	3%
Pediatric rSO2 Sensor Accuracy (ARMS)[2]	≥5 kg and <40 kg
Absolute Regional Oxygen Saturation (rSO2)	5%
Trending Regional Oxygen Saturation (rSO2)	3%
Adult rSO2 Sensor Accuracy (ARMS)[2]	≥40 kg
Absolute Regional Oxygen Saturation (rSO2)	4%
Trending Regional Oxygen Saturation (rSO2)	3%

ENVIRONMENTAL	
Operating Temperature at Ambient Humidity	41 to 104° F (5 to 40° C)
Storage Temperature at Ambient Humidity	-40 to 140° F (-40 to 60° C)
Storage Humidity	15% to 95%, 86 to 140° F (30 to 60° C)

[1] 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.

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