ISA™ OR+™ Multigas Monitoring

Supporting Anesthetic Agent and Ventilation Management

The ISA OR+ sidestream multigas analyzer with the Masimo Root® patient monitoring and connectivity platform provides the following features and benefits:

- During general anesthesia, the ISA OR+ monitors the inhaled and exhaled concentration of five anesthetic gas agents (Sevoflurane, Isoflurane, Halothane, Desflurane, Enflurane), carbon dioxide (CO_2), nitrous oxide (N_2O), and oxygen (O_2), in addition to respiration rate
- Requires only 50 ml sampling flow to support monitoring
- Time-saving in critical situations with virtually no warm-up time and full accuracy performance in less than 20 seconds
- Automatic anesthetic agent identification
- Supports monitoring patients with high respiration rates, up to 150 bpm
- Low-power consumption and automatic temperature and pressure compensation
- Provides minimal alveolar concentration (MAC) calculated from the measured anesthetic agents and N_2O*
- Appropriate for monitoring adult, pediatric, or infant patients in a range of clinical environments including the operating room and intensive care unit
- Compatible with Masimo's Nomoline™ Adapter and the Nomoline Airway Adapter Set to interface with endotracheal tubing

Masimo

COMPONENTS

The portable ISA OR+ module easily mounts onto the back of Root and plugs into a MOC-9™ Port

MOC-9 Ports on Root

Single-patient-use Nomoline Airway Adapter Set

ISA OR+ MOC-9 Module

Nomoline Adapter

When technology modules are connected with Root, multiple additional parameters are available including Masimo SET® pulse oximetry, noninvasive and continuous hemoglobin (SpHb®), PVI,® SedLine® brain function monitoring, and O3™ Regional Oximetry (not available for sale in the U.S.)

PERFORMANCE AND SPECIFICATIONS

GENERAL

Weight	< 420 g
Size	49 x 90 x 100 mm (1.9 x 3.5 x 3.9 inches)
Power Supply	4.5 to 5.5 VDC < 2.0 W (normal op.)

ENVIRONMENTAL

Operating temperature	5 to 50 °C (41 to 122 °F)
Storage	-40 to 70 °C (-40 to 158 °F)
Operating humidity	< 4 kPa H_2O (non-condensing) (95 %RH at 30 °C)
Operating atmospheric pressure	525 – 1200 hPa (< 5211 m)

PATIENT CONNECTIONS

Nomoline	See separate Nomoline information for full details of available options

GAS ANALYZER

Automatic compensation	Pressure, temperature, and broadening effects on CO_2
Warm-up time	< 20 sec
ISA sampling flow rate	50 ± 10 ml/min

Fulfills the requirements of EN ISO 80601-2-55:2011.
Accuracy during standard conditions:

	RANGE	ACCURACY
CO_2	0 – 15 vol%	± (0.2 vol% + 2% of reading)
N_2O	0 – 100 vol%	± (2 vol% + 2% of reading)
HAL, ISO, ENF	0 – 8 vol%	± (0.15 vol% + 5% of reading)
SEV	0 – 10 vol%	± (0.15 vol% + 5% of reading)
DES	0 – 22 vol%	± (0.15 vol% + 5% of reading)
O_2	0 – 100 vol%	± (1 vol% + 2% of reading)

Rise time	CO_2 ≤ 250 ms, N_2O, Agents ≤ 350 ms, O_2 ≤ 450 ms
Total system response time	< 3 sec
Breath detect	Adaptive threshold, minimum 1 vol% CO_2 change
Respiratory rate	0 – 150 bpm ± 1 bpm

CERTIFICATIONS

CE Marked according to the 93/42/EEC Medical Device Directive

Data subject to change without notice

* Altitude, patient age and other individual factors are not considered in the MAC calculation.

Caution: Federal law restricts this device to sale by or on the order of a physician.

For professional use. See instructions for use for full prescribing information, including indications, contraindications, warnings, precautions, and adverse events.

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