

Nonin Regional Oximetry System

Feature Comparison with INVOS® System



Nonin Medical
SenSmart™ Model X-100
Universal Oximetry System



Covidien®
INVOS®
rSO₂ System

Monitor System		
Weight	900 g / 2 lbs	6.85 kg / 14 lbs
Maximum channels	6	4
Battery life	3 hours (when operating with 2 channels)	20 minutes
Battery design	Lithium ion	Lead-acid
Battery re-charge time	2.5 hours	24 hours
Instant reading	Yes	No*
Signal processor/pre-amp size	33 cc	318 cc
Operational Parameters		
Display range of rSO ₂	0–100%	15–95%
Display range of SpO ₂	0–100%	n/a
Refresh rate	1.5 seconds	5-6 seconds
rSO₂ Sensor		
Cerebral indications	Trending, Absolute	Trending only
Somatic indications	Yes	Yes
Wavelengths	3, 4	2
Tolerant of ambient light	Yes	No
Number of light emitters	2	1
Number of light paths	4	2
SpO₂ Sensor		
SpO ₂ accuracy	70–100% ±2 digits[‡]	n/a
SpO ₂ low perfusion accuracy	70–100% ±2 digits[‡]	n/a
SpO ₂ accuracy in motion	70–100% ±3 digits[‡]	n/a
Pulse rate accuracy	18–300 BPM ±3 digits[‡]	n/a
Pulse rate low perfusion accuracy	40–240 BPM ±3 digits[‡]	n/a
Warranty Comparison		
Monitor warranty	36 months	12 months

* Requires signal strength detection.

[‡] See Instruction for Use (IFU) for more information on product specifications and testing. Specifications subject to change without notice.

rSO₂ Sensor Size Comparison

SENSORS SHOWN ACTUAL SIZE



SenSmart™ EQUANOX™ Advance
Model 8004CB/CB-NA
Adhesive/Non-Adhesive
Neonatal/Pediatric

SenSmart™ EQUANOX™ Classic Plus
Model 8003CA
Pediatric/Adult

SenSmart™ EQUANOX™ Advance
Model 8004CA
Pediatric/Adult

SenSmart™ EQUANOX™
Advance Model
8004CB/CB-NA
Neonatal/Pediatric

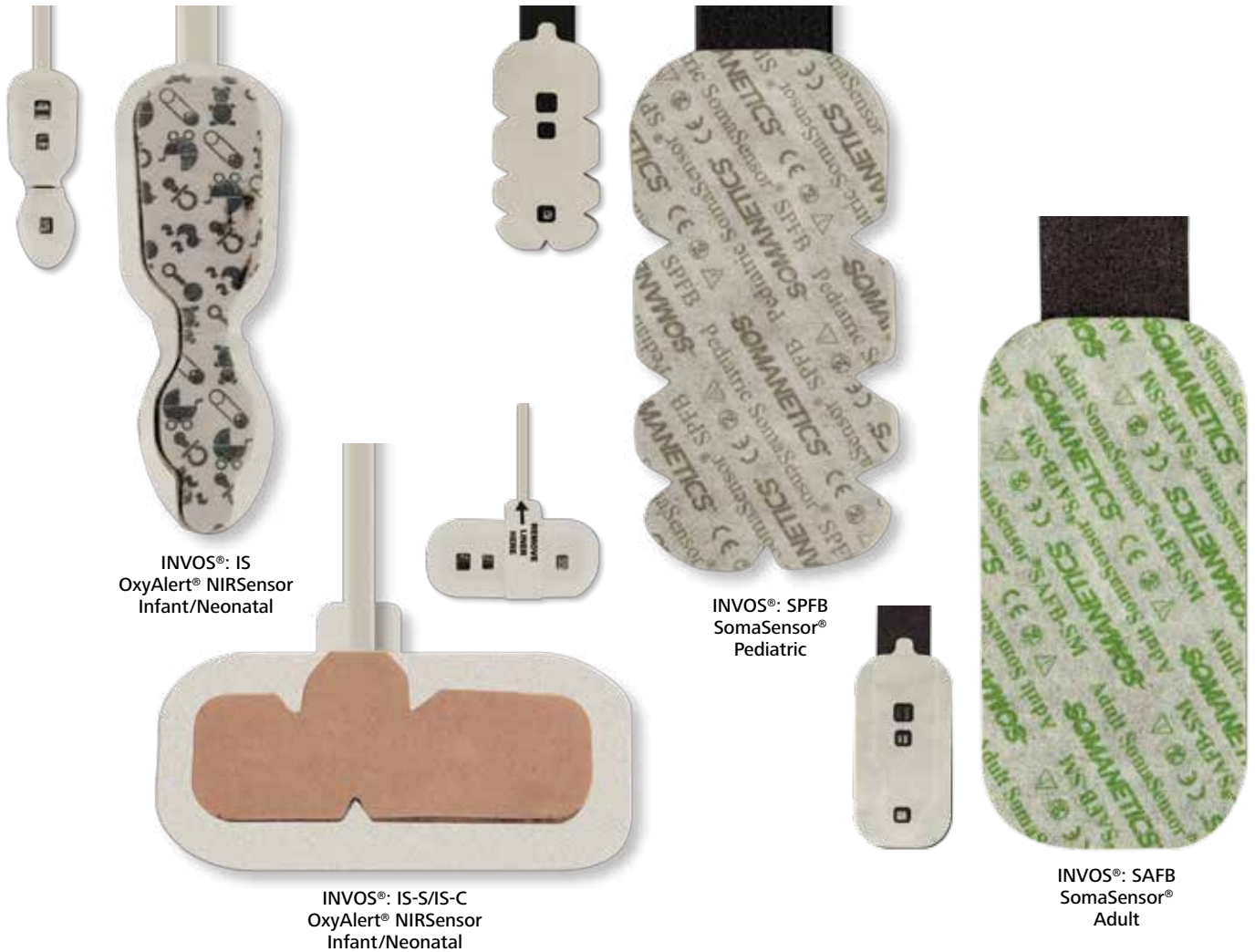
SenSmart™ EQUANOX™
Advance Model 8004CA
Pediatric/Adult

SenSmart™ EQUANOX™
Classic Plus Model 8003CA
Pediatric/Adult

rSO ₂ Sensor Specifications	SenSmart™ EQUANOX™ Advance Model 8004CB/CB-NA Neonatal/Pediatric	SenSmart™ EQUANOX™ Advance Model 8004CA Pediatric/Adult	SenSmart™ EQUANOX™ Classic Plus Model 8003CA Pediatric/Adult
Dimensions (approximate)	13.2 cm ²	25.4 cm ²	25.4 cm ²
Cable direction off of sensor	Middle	Middle	Middle
Non-adhesive version	Yes	No	No
Emitter/diode spacing	12.5–25.0 mm	20–40 mm	20–40 mm
Number of light paths	4	4	4
Approximate depth of light penetration	12.5 mm	20 mm	20 mm
Absolute accuracy (vs. trending only)	Yes	Yes	No
4-wavelength	Yes	Yes	No, 3-Wavelength
Weight range	<40 kg	>40 kg	>40 kg
Placement options	Cerebral / Somatic	Cerebral / Somatic	Cerebral / Somatic

rSO₂ Sensor Size Comparison

SENSORS SHOWN ACTUAL SIZE



INVOS®: IS
OxyAlert® NIRSensor
Infant/Neonatal

INVOS®: IS-S/IS-C
OxyAlert® NIRSensor
Infant/Neonatal

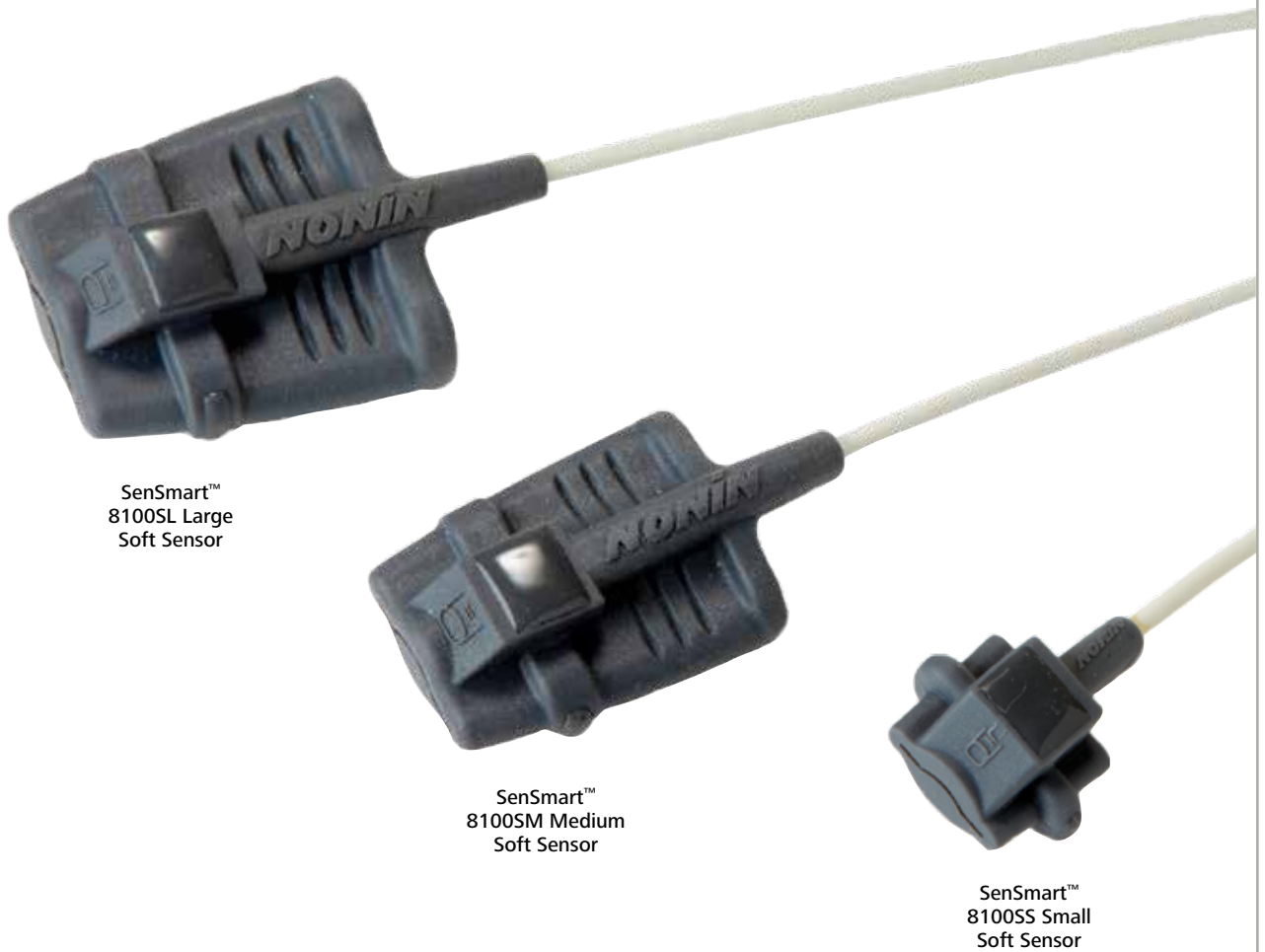
INVOS®: SPFB
SomaSensor®
Pediatric

INVOS®: SAFB
SomaSensor®
Adult

INVOS®: IS OxyAlert® NIRSensor Infant/Neonatal	INVOS®: IS-S/IS-C OxyAlert® NIRSensor Infant/Neonatal	INVOS®: SPFB SomaSensor® Pediatric	INVOS®: SAFB SomaSensor® Adult
17.25 cm ²	22.4 cm ²	26.8 cm ²	28.1 cm ²
Side	Off Center	Side	Side
No	No	No	No
30–40 mm	30–40 mm	30–40 mm	30–40 mm
2	2	2	2
20 mm	20 mm	20 mm	20 mm
No	No	No	No
No	No	No	No
2.5–40 kg	2.5–40 kg	2.5–40 kg	> 40 kg
Cerebral / Somatic	Cerebral / Somatic	Cerebral / Somatic	Cerebral / Somatic

SpO₂ Sensor Size Comparison

SENSORS SHOWN ACTUAL SIZE



SenSmart™
8100SL Large
Soft Sensor

SenSmart™
8100SM Medium
Soft Sensor

SenSmart™
8100SS Small
Soft Sensor

SenSmart™
8100SL Large
Soft Sensor

SenSmart™
8100SM Medium
Soft Sensor

SenSmart™
8100SS Small
Soft Sensor

SpO ₂ Sensor Specifications	SenSmart™ 8100SL Large Soft Sensor	SenSmart™ 8100SM Medium Soft Sensor	SenSmart™ 8100SS Small Soft Sensor
Digit thickness (mm)	12.5 to 25.5	10 to 19	7.5 to 12.5
Digit thickness (in)	0.5 to 1.0	0.4 to 0.75	0.3 to 0.5
Preferred Application	Fingers	Fingers	Fingers
Reusable	Yes	Yes	Yes
Warranty	2 Years	2 Years	2 Years



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