SenSmart™ Model X-100

Universal Oximetry System

Monitor

Hub

Signal Processors

SpO₂ Sensor

rSO₂ Sensors

SenSmart™ System shown with 4 channels connected, and SenSmart X-100SP-1 through X-100SP-4 Signal Processors, X-100H Hub, 8100SM Soft Pulse Oximetry Sensor and 8004CA EQUANOX Advance Regional Oximetry Sensors.
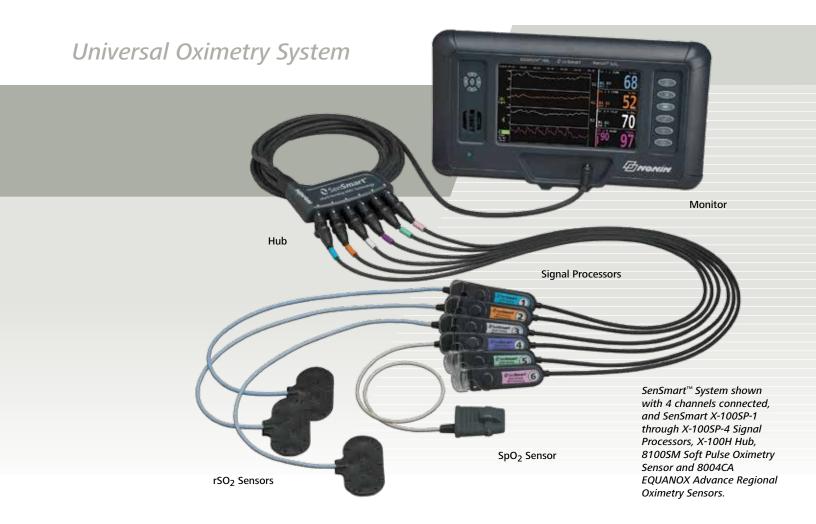
The first oximetry system to put regional oximetry, pulse oximetry and ease of use at your fingertips.

An innovative design that pairs simple with smart, Nonin Medical's **SenSmart Model X-100 Universal Oximetry System** is the first system to deliver both pulse and regional oximetry measurements today, and is designed to accommodate more parameters in the future. The portable SenSmart System provides multiple rSO₂ and SpO₂ values on the same screen for real-time decision making.

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SenSmart™ Model X-100
Universal Oximetry System
Product Highlights

- **Highly Accurate** – The SenSmart System's EQUANOX Advance 8004CA rSO_2 Sensor provides clinicians with state-of-the-art accuracy. Nonin's reusable SpO_2 Soft Sensors provide fast, accurate and reliable readings even in patients with low perfusion or in the presence of motion.

- **Versatile** – The ability to use any combination of Nonin SenSmart-compatible rSO_2 sensors and/or SpO_2 sensors to monitor up to six sites on a patient.

- **Easy to Use** – The smaller, lighter and less-intrusive SenSmart Universal Signal Processors automatically recognize and display all of your oximetry values on the SenSmart Monitor.

- **Convenient** – The portable, easy-to-operate SenSmart Monitor offers *Bluetooth* wireless connectivity and comes with case download software.

Monitor: 305 mm W x 180 mm H x 130 mm D

Data Management

The SenSmart™ Download Software enables the easy transfer of a patient file as a PDF or CSV file.

SenSmart™ Model X-100 System Components

SenSmart Standard System Configuration
System Configuration with US power plug
System Configuration with UK power plug
System Configuration with EU power plug
System Configuration with AU power plug

SenSmart X-100M Monitor[†]

SenSmart X-100SP-1 Signal Processor Channel 1[†]

SenSmart X-100SP-2 Signal Processor Channel 2[†]

SenSmart X-100SP-3 Signal Processor Channel 3

SenSmart X-100SP-4 Signal Processor Channel 4

SenSmart X-100SP-5 Signal Processor Channel 5

SenSmart X-100SP-6 Signal Processor Channel 6

SenSmart X-100H Hub[†]

SenSmart X-100HH Hub Holster[†]

SenSmart X-100EC-1 Extension Cable (1 m)[†*]

SenSmart X-100EC-2 Extension Cable (2 m)

SenSmart 8100SS Soft Pulse Oximetry Sensor (small)

SenSmart 8100SM Soft Pulse Oximetry Sensor (medium)

SenSmart 8100SL Soft Pulse Oximetry Sensor (large)

SenSmart 8004CA EQUANOX Advance Adult/ Pediatric Regional Oximetry Sensor (absolute) (20 pack)

SenSmart 8003CA EQUANOX Classic Plus Adult/Pediatric Regional Oximetry Sensor (trending) (20 pack)

SenSmart 8004CB EQUANOX Advance Neonatal/Pediatric Regional Oximetry Sensor (adhesive) (20 pack)

SenSmart 8004CB-NA EQUANOX Advance Neonatal/Pediatric Regional Oximetry Sensor (non-adhesive) (20 pack)

SenSmart X-100CC Carrying Case

Pole Mount Clamp

SenSmart MPP30M Power Supply[†]

SenSmart Download Software[†]

[†]**Indicates component is included in the Standard System Configuration.**
*Standard System Configuration includes two cables.

Specifications

Oxygen Saturation Display Ranges: rSO_2: 0 to 100%, SpO_2: 0 to 100%
Pulse Rate Display Range: 18 to 300 beats per minute (BPM)
Sensor Accuracy: For declared accuracy data for compatible sensors, refer to the sensor Instructions for Use (IFU). Sensor IFUs are included on the operator's manual CD.
Memory:
840 hours (operating with 2 channels)
420 hours (operating with 4 channels)
280 hours (operating with 6 channels)
Temperature: Operating: 0 °C to 40 °C (32 °F to 104 °F)
Storage/Transportation: -30 °C to 70 °C (-22 °F to 158 °F)
Humidity: Operating: 15% to 93% noncondensing,
Storage/Transportation: Up to 93% noncondensing
Altitude: Operating: 0 to 4,000 meters (13,124 feet)
Power Requirements (Mains): 100–240 VAC 50–60 Hz
Internal Power:
Battery: 7.2 volt Li-ion battery pack, 2.4 Ah when charged
Operating Life (fully charged battery and screen at default brightness):
3 hours minimum (operating with 2 channels)
1 hour minimum (operating with 6 channels)
Charged Storage Life: 20 days minimum
Recharge Time to 90% Capacity: 2.5 hours maximum
Dimensions:
X-100M: 305 mm W x 180 mm H x 130 mm D (12.0 in W x 7.2 in H x 5.0 in D)
X-100H: 105 mm W x 66 mm H x 22 mm D with 4.0 m cable (4.14 in. W x 2.6 in H x 0.86 in D with 13.1 ft cable)
X-100SP: 21.4 mm H x 21.7 mm W x 72.7 mm L (including strain relief) with 0.75 m cable (0.84 in H x 0.85 in W x 3.1 in L (including strain relief) with 2.5 ft cable)
Weight:
X-100M: Approximately 900 grams (2 pounds)
X-100H: 243 grams (8.6 ounces)
X-100SP: 40 grams (1.4 ounces)
Warranty: X-100M, X-100SP, X-100H, X-100HH, X-100EC: 3 years; X-100M Battery Pack: 1 year
Classification per IEC 60601-1 / CAN/CSA-C22.2 No. 601.1 / UL60601-1:
Type of Protection: Internally powered (on battery power) Class II with AC adapter
Degree of Protection: X-100SP: Defibrillation Proof Type BF Applied Part
X-100M: Type BF Applied Part
Mode of Operation: Continuous
Enclosure Degree of Ingress Protection: X-100M, X-100H, X-100SP: IP32
Transmitter
Bluetooth Compliance: Version 2.0
Operating Frequency: 2.4 to 2.4835 GHz
Output Power: < 20 dBm
Operating Range: 100 meter (328 feet) radius indoors (line of sight when connected to a class I device)
Network Topology: Star
Operation: *Bluetooth* Slave
Antenna Type: Internal

Modulation Type: Gaussian Frequency Shift Keying
Bandwidth: 1 MHz
Bluetooth Profiles Supported: Serial Port Profile (SPP)
Security Mode: Mode 2 (service level enforced security)
Authentication and Encryption: Enforced on all data channels (outgoing and incoming)
Encryption Key Size: Up to 128 bits

Specifications are subject to change without notice.

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