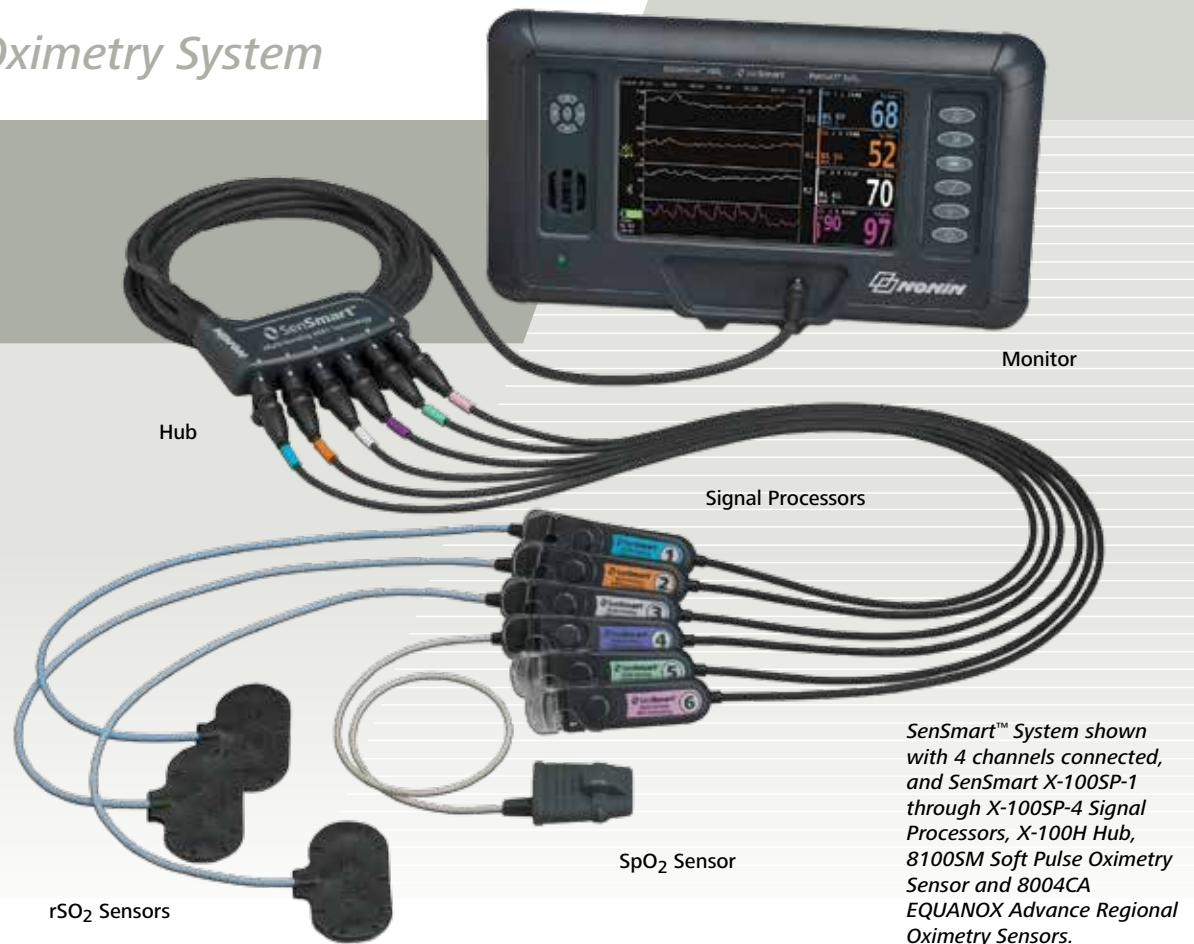


# SenSmart™ Model X-100

## Universal Oximetry System



*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 rSO<sub>2</sub> and SpO<sub>2</sub> values on the same screen for real-time decision making.

# SenSmart™ Model X-100 Universal Oximetry System

## Product Highlights

- **Highly Accurate** – The SenSmart System's EQUANOX Advance 8004CA rSO<sub>2</sub> Sensor provides clinicians with state-of-the-art accuracy. Nonin's reusable SpO<sub>2</sub> 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<sub>2</sub> sensors and/or SpO<sub>2</sub> 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

<b>SenSmart Standard System Configuration</b> 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 8100SS Soft Pulse Oximetry Sensor (small) SenSmart 8100SM Soft Pulse Oximetry Sensor (medium) SenSmart 8100SL Soft Pulse Oximetry Sensor (large)
<b>SenSmart X-100M Monitor<sup>†</sup></b>	SenSmart 8100CC Carrying Case
<b>SenSmart X-100SP-1 Signal Processor Channel 1<sup>†</sup></b>	Pole Mount Clamp
<b>SenSmart X-100SP-2 Signal Processor Channel 2<sup>†</sup></b>	<b>SenSmart MPP30M Power Supply<sup>†</sup></b> <b>SenSmart Download Software<sup>†</sup></b>
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	
<b>SenSmart X-100H Hub<sup>†</sup></b>	
<b>SenSmart X-100HH Hub Holster<sup>†</sup></b>	
<b>SenSmart X-100EC-1 Extension Cable (1 m)*</b>	
SenSmart X-100EC-2 Extension Cable (2 m)	

<sup>†</sup>Indicates component is included in the Standard System Configuration.

\*Standard System Configuration includes two cables.

## Specifications

**Oxygen Saturation Display Ranges:** rSO<sub>2</sub>: 0 to 100%, SpO<sub>2</sub>: 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:

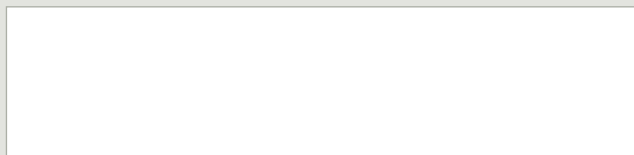
Enforced on all data channels

(outgoing and incoming)

Encryption Key Size: Up to 128 bits

Specifications are subject to change without notice.

Authorized Distributor:



©2014 Nonin Medical, Inc. All trademarks are the property of Nonin Medical, Inc. unless otherwise noted. *Bluetooth*® and the *Bluetooth* Logo® are registered trademarks of *Bluetooth* SIG, Inc.  
P/N 10391-001-01

**Nonin Medical, Inc.**

13700 1st Avenue North

Plymouth, MN • 55441-5443 • U.S.A.

**Tel:** +1.763.553.9968 1.800.356.8874

**Fax:** +1.763.577.5521

**E-mail:** info@nonin.com

[sensmart.com](http://sensmart.com)

[nonin.com](http://nonin.com)

**Nonin Medical B.V.**

Prins Hendriklaan 26

1075 BD Amsterdam • Netherlands

**Tel:** +31 (0)13-79 99 040

**Fax:** +31 (0)13-79 99 042

**E-mail:** infointl@nonin.com

