SenSmart™ Model X-100

Universal Oximetry System

Hub

Monitor

Signal Processors

SenSmart™ System shown with 6 channels connected*, and SenSmart X-100SP-1 through X-100SP-6 Signal Processors, X-100H Hub, 8100M Soft Pulse Oximetry Sensor and 8004CA EQUANOX Advance Regional Oximetry Sensors.

rSO$_2$ Sensors

SpO$_2$ Sensor

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 many more parameters in the future. The SenSmart System provides a side-by-side view of rSO$_2$, SpO$_2$, and pulse rate values for real-time decision making. You now have the opportunity to explore what a gradient between rSO$_2$ and SpO$_2$ might tell you.

*Contact Nonin for availability.

NONIN

Leaders in **Nonin**vasive Medical Monitoring

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: 305mm 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

Description	Part Number
SenSmart Standard System Configuration	
System Configuration with US power plug	X-100-01
System Configuration with UK power plug	X-100-02
System Configuration with EU power plug	X-100-03
System Configuration with AU power plug	X-100-04
SenSmart X-100M Monitor [†]	8366-001
SenSmart X-100SP-1 Signal Processor Channel 1[†]	8650-001
SenSmart X-100SP-2 Signal Processor Channel 2[†]	8650-002
SenSmart X-100SP-3 Signal Processor Channel 3	8650-003
SenSmart X-100SP-4 Signal Processor Channel 4	8650-004
SenSmart X-100SP-5 Signal Processor Channel 5	8650-005
SenSmart X-100SP-6 Signal Processor Channel 6	8650-006
SenSmart X-100H Hub[†]	8646-001
SenSmart X-100HH Hub Holster[†]	8662-001
SenSmart X-100EC-1 Extension Cable (1 m)[†]	8445-001
SenSmart X-100EC-2 Extension Cable (2 m)[†]	8445-002
SenSmart 8100SS Soft Pulse Oximetry Sensor (small)	8703-001
SenSmart 8100SM Soft Pulse Oximetry Sensor (medium)	8705-001
SenSmart 8100SL Soft Pulse Oximetry Sensor (large)	8534-001
SenSmart 8004CA EQUANOX Advance Adult/Pediatric Regional Oximetry Sensor (absolute) (20 pack)	8974-001
SenSmart 8003CA EQUANOX Classic Plus Adult/Pediatric Regional Oximetry Sensor (trending) (20 pack)	9206-001
SenSmart 8004CB EQUANOX Advance Neonatal/Pediatric Regional Oximetry Sensor (adhesive) (20 pack)	9211-001
SenSmart 8004CB-NA EQUANOX Advance Neonatal/Pediatric Regional Oximetry Sensor (non-adhesive) (20 pack)	9216-001
SenSmart X-100CC Carrying Case	8664-001
SenSmart X-100 Pole Mount Clamp	5924-000

†Indicates component is included in the Standard System Configuration.

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)
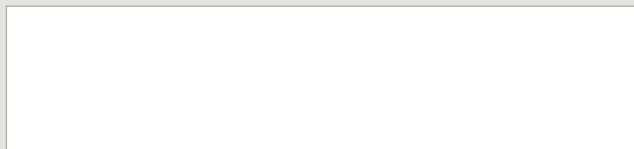Authentication and Encryption: Enforced on all data channels (outgoing and incoming)
Encryption Key Size: Up to 128 bits

Specifications are subject to change without notice.

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