

Avant[®] 9700

Tabletop/Portable Pulse Oximeter with Waveform



Distinctive Displays – Dependable Performance

The plethysmographic waveform alters color as a real-time reflection of the patient's pulse signal quality — alerting you to patient changes.

The high-resolution color display compliments the signal quality indicators and LED values. The Avant 9700 combines flexible alarm options, unparalleled non-volatile memory, and Nonin's time-honored technology to give you an easy-to-use and efficient monitor.

A variety of single-use and reusable sensors are available for use with the Avant 9700. Nonin Medical's PureLight[®] sensors produce accurate and dependable SpO₂ readings from patient-to-patient and sensor-to-sensor. Use only Nonin branded sensors.

Avant® 9700

Product Highlights

- **Easy-to-Use** – Intuitive, color coded displays
- **Versatile** – Monitor neonates to adults; acute care to homecare
- **Flexible** – Patient Security Mode, Nurse Call and User-Defined Defaults
- **Convenient** – Compact, lightweight and durable

User-Friendly Interface

The Avant 9700 provides a variety of display indicators to ensure reliable readings for easy patient evaluation.



Qualitative Pulse Strength – Color-coded bar graph assists in assessing the patient’s status. An audible tone is generated with each pulse; the pitch changes with the patient’s saturation level.



Pulse Quality Indicator – Detects movement or signal quality changes that may necessitate the need for sensor site stabilization.



Sensor Indicator – The sensor icon indicates the lack of sensor presence or the need for sensor attention.

A quick and complete assessment of your patient’s oximetry readings is made easier with the combination of information supplied by the Qualitative Pulse Strength bar graph, variable pitch pulse/saturation tone and Pulse Quality Indicator.

Flexible and Versatile Alarm Settings

Patient Security Mode	Locks alarm limits, volume and time/date settings, preventing unintentional changes.
Nurse Call	Facility’s call indicator light system connects via cable connection.
Latched Mode	Audible and visual indication of an alarm continues even after an event has ended.
Unlatched Mode	Audible and visual indication of an alarm state concludes when an event has ended.
Recall Function	Reinstatement of user’s last customized alarm settings
User-Defined Defaults	Alarm settings return to user customized settings on every power up.

Authorized Distributor:

The HomeCare Medical Ltd.

401-403 Wing Ming Industrial Centre,
15 Cheung Yue Street,
Lai Chi Kok, Kowloon
Phone: 2402-2188 Fax: 2411-2323

Specifications

Oximeter

Oxygen Saturation Range (%SpO₂)0% to 100%
Pulse Rate Range.....18 to 300 pulses per minute

Displays

Numeric Displays.....3-digit LEDs, Tricolor (red, green, amber)
Pulse Strength Indicator.....Tricolor LED
Pulse Quality Indicator.....Amber LED
LCD16 color; 256 x 64 pixels

Accuracy^a

Blood Oxygen Saturation (%SpO₂ ±1 SD)^b
No Motion: Adults, Pediatrics70–100% ±2 digits
Neonates70–100% ±3 digits
Motion: Adults, Pediatrics70–100% ±2 digits
Neonates70–100% ±3 digits
Low Perfusion: Adults, Pediatrics70–100% ±2 digits
Neonates70–100% ±3 digits

Pulse Rate

No Motion.....18 to 300 bpm ±3 digits
Motion60 to 240 bpm ±5 digits
Low Perfusion.....60 to 240 bpm ±3 digits

Temperature

Operating.....+32° to +122°F (+0° to +50°C)
Storage/Transportation-22° to +122°F (-30° to +50°C)

Humidity

Operating.....10% to 90% noncondensing
Storage/Transportation10% to 95% noncondensing

Altitude

Operating.....Up to 40,000 feet (12,192 m)

Power Requirements

Mains.....100-240 VAC 50-60 Hz
DC Input12 VDC 1.5A AC adapter

Internal Power

Battery7.2 volt battery pack (6 cells)
Operating.....Minimum 12 hours of continuous operation with a fully charged battery pack and **LCD backlight off**. Minimum 8 hours of continuous operation with a fully charged battery pack and **LCD backlight on**.
Storage27 days
Recharge.....4 hours

Dimensions

.....7.25" wide x 5.5" high x 4.5" deep
18.4 cm x 14 cm x 11.4 cm

Weight (excluding Pole Mount System)

.....2.4 pounds (1.1 kg)

Memory

.....115 hours non-volatile

Warranty

.....1 year

Classifications per IEC 60601-1/UL60601-1

Type of Protection.....Class II (when on AC power with MPP30 battery charger)
Internally powered (on battery power)
Degree of Protection.....Type BF-Applied Part
Enclosure Degree of Ingress Protection.....IPX2

Nurse Call

Maximum Voltage.....30 V, AC or DC
Maximum Load Current.....100mA
Output Impedance.....30 ohm (max)
Output.....Normally Open or Normally Closed; switch selectable
Output Connector.....0.141" miniature phone jack

^a Accuracy is expressed for adult patients and determined with the Reusable 8000AA Finger Clip Sensor and 8000J Flex Sensor. All accuracy specifications are results determined by induced hypoxia studies on healthy adult volunteers. Motion accuracy specifications apply to the 8000AA Finger Clip Sensor and 8000J Flex Sensor. The low perfusion specifications apply to monitor performance.

^b ±1 A_{rms} represents approximately 68% of measurements.

Quality systems registered to ISO 13485, and EC certificates per Annex II, clause 3 of EC Directive No. 93/42/EEC concerning medical devices.