

Simple Calibration

The Avant® 2120 can be calibrated on-site using simple equipment and a flip of the switch located on the back of the unit. There is no need to send the unit in for routine calibration. As an added convenience, the Avant 2120 only requires calibration of the NIBP module once a year or every 10,000 cycles, whichever comes first.



Select Your Options

The Avant 2120 includes the option of dual voltage adaptability or battery operation (universal power pack) – providing a reliable power source for any application – anywhere. Its impressive battery life and quick recharge time make it a rugged workhorse. The Avant 2120 can also be customized to fit any application:

- ✓ Assorted Cuff Sizes - Fits a wide range of patients
- ✓ Rolling Stand - Standard or deluxe 5 point stand increases portability – Avant Series Product
- ✓ Sensors & Cables - Use with NONIN's complete line of PureLight® sensors & cables (Neonate, Infant, Pediatric, Adult)
- ✓ Carrying Case - Convenient for transport and storage – Avant Series Product
- ✓ Pole Clamp - Mounts horizontal or vertical – Avant Series Product
- ✓ Output Options - nVISION® Data Management Software for oximetry screening
- Portable thermal printer
- Digital to Analog Converter Module



Your Partner of Choice

With over 20 years of experience and dedication to the design and support of noninvasive monitoring devices, NONIN has helped many medical professionals meet clinical and economic objectives. Trusted by clinicians worldwide, countless tests are performed every day on thousands of NONIN pulse oximeters in more than 125 countries. NONIN's dedication to technological leadership, precision manufacturing and uncompromised customer support ensures quality products and service you expect.

Please contact your authorized distributor for more information.

Specifications

NIBP

Method of Measurement	Oscillometric
Blood Pressure Range	Systolic: 40 mmHg to 260 mmHg Diastolic: 25 mmHg to 200 mmHg MAP = 1/3 Systolic + 2/3 Diastolic
Pressure Transducer Accuracy	±3 mmHg between 0 mmHg and 300 mmHg for operating conditions between 0°C and 50°C. (S.D. of 8 mmHg)
Recommended Frequency of Pressure Transducer Calibration	The Pressure Transducer calibration should be verified yearly or every 10,000 readings, whichever comes first.
Pulse Rate Range	To 200 pulses per minute (if derived from oscillometric waveform not from SpO ₂)
Blood Pressure Altitude	-170 to 1700 m

Oximeter

Oxygen Saturation Range (%SpO ₂)	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 (red, green, amber)
Pulse Quality Indicator	Amber LED
Accuracy ^a	
Blood Oxygen Saturation (%SpO ₂) (±1 SD) ^b	
No Motion: Adults, Pediatrics	70 - 100% ±2 digits
Neonates	70 - 100% ±3 digits
Motion: Adults, Pediatrics	70 - 100% ±2 digits
Neonates	70 - 100% ±3 digits
Low Perfusion: Adults, Pediatrics	70 - 100% ±2 digits
Neonates	70 - 100% ±3 digits
Pulse Rate	
No Motion	40 to 240 bpm ±3 digits
Motion	40 to 240 bpm ±5 digits
Low Perfusion	40 to 240 bpm ±3 digits
Altitude	
Operating Altitude	Up to 40,000 feet
Hyperbaric Pressure	Up to 4 atmospheres

System

Temperature	
Operating / Storage	+32° to +122°F (+0° to +50°C) / -4° to +113°F (-20° to +50°C)
Humidity	
Operating / Storage	10% to 90% noncondensing / 10% to 95% noncondensing
Power Requirements	7.2 volt battery pack (6 cells) or 12 VDC AC adapter
Battery Life	
Operating / Storage	Minimum 5 hours of continuous operation / 18 days
Dimensions	4.5 x 7.5 x 5.4 in. (11.4 x 19.0 x 13.8 cm)
Weight	2.8 lbs with batteries (1.3 kg)
Memory	33.5 hours
Warranty	3 yrs for Pulse Oximeter, 2 yrs for NIBP Module

Classifications per IEC 60601-1/UL2601-1

Type of Protection	Class I (when on AC power with 300PS-UNIV battery charger) Class II (when on AC power w/all other specified battery chargers) Internally powered (on battery power)
Degree of Protection	Type BF-Applied Part (Pulse Oximeter & NIBP) Defibrillator Proof (NIBP ONLY)
Enclosure Degree of Ingress Protection	IPXo
Mode of Operation	Continuous

^aAccuracy is expressed for adult patients and determined with the Reusable 8000AA Finger Clip 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. The low perfusion specifications apply to monitor performance.

^bS.D. (Standard Deviation) is a statistical measure; up to 32% of the readings may fall outside these limits.

Quality systems registered to ISO 13485:2003 and EC certificates per Annex II, clause 3 of EC Directive No. 93/42/EEC concerning medical devices.



Specifications are subject to change without notice.



www.nonin.com

Nonin Medical, Inc.
13700 1st Avenue North
Plymouth, MN 55441-5443, USA
Phone: +1.763.553.9968 Toll Free: 1.800.356.8874
Fax: +1.763.553.7807
info@nonin.com

✓ Where People Make the Difference



Multi-Function

2120 Avant®

Noninvasive Blood Pressure Monitor & Digital Pulse Oximeter



Product Highlights

- ✓ Dual Functionality - NIBP & SpO₂ monitoring
- ✓ Flexible - Automated and on-demand NIBP measurements
- ✓ Adjustable Pressure - User or system-defined dynamic inflation pressure
- ✓ Cost Effective - Quick on-site user calibration
- ✓ Efficient - Dual voltage adaptability or battery operation; quick recharge
- ✓ Comprehensive Data Capture - Ideal for extended monitoring

✓ Where People Make the Difference

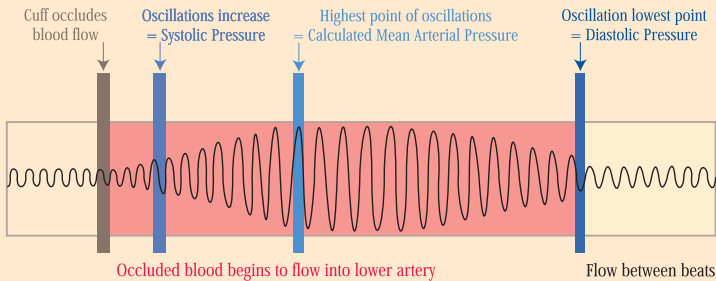


High Performance NIBP & SpO₂ Monitoring

The Avant 2120 is a multi-purpose device offering both noninvasive blood pressure (NIBP) and proven pulse oximetry monitoring – all in one compact, lightweight and easy-to-use portable unit. Offering maximum versatility in patient monitoring, the Avant 2120 is designed for effortless mobility – by easily attaching the unit to a rolling stand or simply carrying it with its integrated handle.

Proven Technology

The NIBP module features an oscillometric blood pressure method providing fast, motion-tolerant readings. Oscillating pulsations in the arterial wall are filtered and amplified to create an oscillometric waveform.



PureSAT[®]

NONIN's PureSAT technology makes greater use of signal characteristics for artifact rejection, using improved pulse detection technology for faster, more precise pulse detection and quick readings.

User-Friendly Interface

The Avant 2120 provides a variety of display indicators to ensure reliable readings for easy patient evaluation.



pulse strength indicator

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

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



sensor indicator

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.

2120 Avant[®]

NIBP Monitor & Digital Pulse Oximeter



Measurement Versatility

The Avant 2120 offers a variety of options to ensure you get the data needed to monitor the patient effectively – even in the most challenging situations.

Automatic Mode – Set the time interval between the readings and the monitor does the rest.

On-Demand Readings – Conveniently measure with a simple press of a button.

History Review – Provides up to 300 NIBP and SpO₂ readings for printing and review.

Inflation Pressure – Easily adjust pressure to meet patient's specific needs.

Universal Date Format – The internal clock and calendar can be set in International or US date format.

Dynamic Pressure Management – After the first blood pressure reading the Avant 2120 will determine correct inflation pressure for subsequent readings and dynamically adjust the inflation pressure.

Flexible NIBP & SpO₂ Alarms

Individual alarm parameters may be easily modified to meet the dynamics of your patient population.

Customizable NIBP & SpO₂ Alarms Easily adjust the high and low alarm parameters to meet your specific patient needs.

Recall Function Reinstatement of user's last customized alarm settings.

User-Defined Defaults Alarm and volume settings return to user customized settings on every power up.

Reliable MAP Values Select the high and low mean arterial pressure (MAP) alarm values to provide a simple indicator of the patient's current blood pressure status.

Printing Options

The Avant 2120 has three convenient printing options:

1. Print-on-Demand – one touch printing
2. Automatic Mode – easily programmable
3. Real-time Printing – once-per-second outputs

