



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*

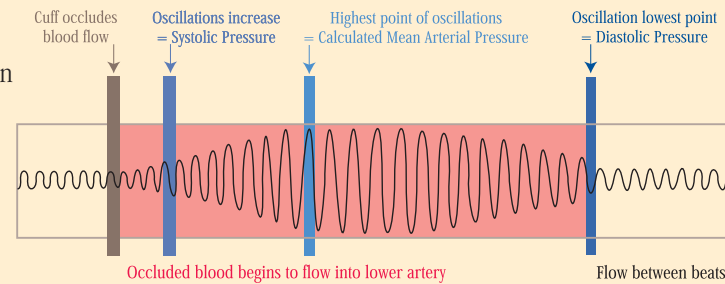
✓ *Where People Make the Difference*

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. Ideal for pediatrics through adults, the 2120 offers an assortment of Nonin sensor and blood pressure cuff sizes to adapt to each patient application.*

Proven Technology

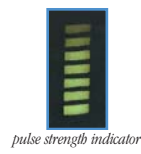
The NIBP module features an oscillometric blood pressure method providing fast, motion-tolerant readings. Oscillation pulsations in the arterial wall are filtered and amplified to create an oscillometric waveform.



The Avant 2120 also incorporates Nonin's proven digital pulse oximetry trusted by clinicians worldwide. The SpO₂ module provides an accurate assessment of the patient's blood oxygen saturation and pulse rate. You can rely on a dependable, quality reading even with the most challenging of patients.

Data Integrity

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



pulse strength indicator

Qualitative Pulse Strength Indicator - The new tricolor pulse strength indicator provides up-to-the-second assessment of each patient pulse detected. The ten-segment bar graph categorizes the pulse strength measured as good (green), marginal (amber) or low (red).



pulse quality indicator

Pulse Quality Indicator - Nonin's pulse quality indicator appears with changes in the patient's pulse signals. It is designed to alert you to inconsistencies in the patient's SpO₂ perfusion.



sensor indicator

Sensor Indicator - And for added assurance, a sensor icon indicates sensor presence or if the sensor needs readjustment.

Cost-Effective Maintenance

When dealing with quantitative measurement devices, it's important to keep their calibration up-to-date. 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 - users can cost-effectively calibrate the NIBP module on their own. 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.

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 readings for your review, with readings numbered sequentially from earliest to the most recent.

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

Universal Date Format - An 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 adjusts the inflation pressure.

Dependable NIBP & SpO₂ Alarms

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



Customize NIBP Alarms - Easily adjust the high and low systolic and diastolic pressure values.

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.

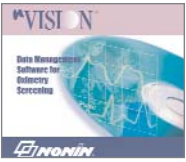
Customize SpO₂ Alarms - Use standard high and low oximetry alarm values or change the alarm parameters to meet your specific needs.

Recall Settings - Conveniently recall your customized alarm settings the next time you use the Avant 2120.



*The Avant 2120 comes standard with the 8000AA adult articulated reusable sensor and the standard adult blood pressure cuff.

Comprehensive Data Capture



With the standard integrated SpO₂ memory, the Avant 2120 can be used for extended monitoring situations. When used with Nonin's proprietary software, nVISION™, a clear picture of the trended SpO₂ and heart rate data can be reviewed instantly – including the ability to edit trended data.

Powerful 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.



You can be confident that the user-friendly Avant 2120 will make patient monitoring convenient wherever NIBP and/or pulse oximetry is needed. Ideal for pediatric through adult patients, the Avant 2120 can be customized to fit any application:

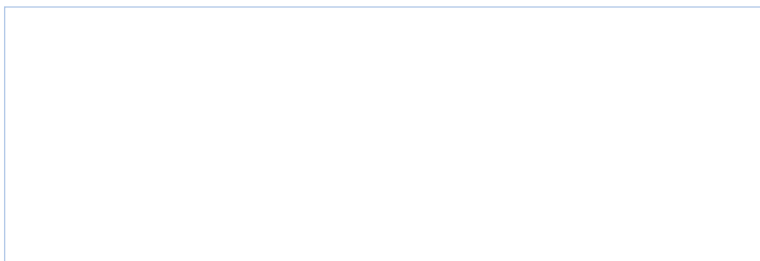
- ✓ Assorted Cuff Sizes - Fits a wide range of patients
- ✓ Rolling Stand - Standard or deluxe stand increases portability
- ✓ Sensors - Complete line of sensors
- ✓ NiMH Battery Pack - Flexible power source for mobility
- ✓ Carrying Case - Convenient for transport and storage
- ✓ nVISION™ Data Management Software - For oximetry screening



Your Partner of Choice

With over 15 years of experience and dedication to the design and support of 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 (if derived from oscillometric waveform not from SpO ₂)	To 200 pulses per minute
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
Measurement Wavelengths	Red: 660 nanometers @ 3 mw nominal Infrared: 910 nanometers @ 3 mw nominal
Accuracy	Blood Oxygen Saturation (%SpO ₂) (±1 S.D.): 70 - 100% ± 2 digits Pulse Rate: ±3% ± 1 digit
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	45.3 oz with batteries (1.3 kg)
Warranty	3 yrs for Pulse Oximeter, 2 yr for NIBP Monitor, 1 yr for Battery Pack

Classifications per IEC 60601-1/CSA601.1/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	IPX0
Mode of Operation	Continuous

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

Quality systems registered to ISO 9001:1994/EN 46001:1996, ISO 13485:1996, and CE self-marking per Annex II, Clause 3 of EC Directive No. 93/42/EEC concerning medical devices.



Specifications are subject to change without notice.



Nonin Medical, Inc.
2605 Fernbrook Lane North
Plymouth, MN 55447-4755, USA
Phone: 763.553.9968 Toll Free: 800.356.8874
Fax: 763.553.7807
info@nonin.com