

# Nonin Technical Bulletin

## Avant® 2120 Study Data

### Performance Characteristics Under Conditions of Motion and Low Perfusion

#### Avant 2120 with PureSAT® Signal Processing Technology

Saturation Accuracy (%SpO <sub>2</sub> + 1 SD) 70-100%			Pulse rate accuracy 40-240 beats/min		
No Motion	Adults/Peds	± 2 digits	No Motion	Adults/Peds	± 3 digits
	Neonates	± 3 digits		Neonates	± 3 digits
Motion	Adults/Peds	± 2 digits	Motion	Adults/Peds	± 5 digits
	Neonates	± 3 digits		Neonates	± 5 digits
Low Perfusion	Adults/Peds	± 2 digits	Low Perfusion	Adults/Peds	± 3 digits
	Neonates	± 3 digits		Neonates	± 3 digits

#### How was the testing done?

Saturation testing in a motion environment was conducted on human subjects at the Hypoxia Research Laboratory (Severinghaus) at the University of California, San Francisco. The Radiometer OSM-3 Multi-wavelength CO-oximeter was used as the gold standard for accuracy testing.

Protocols for testing were in line with common industry practices and incorporated the Avant 2120 and the 8000AA finger clip sensor. Pulse rate motion and low perfusion were tested in-house, utilizing an industry standard simulator.