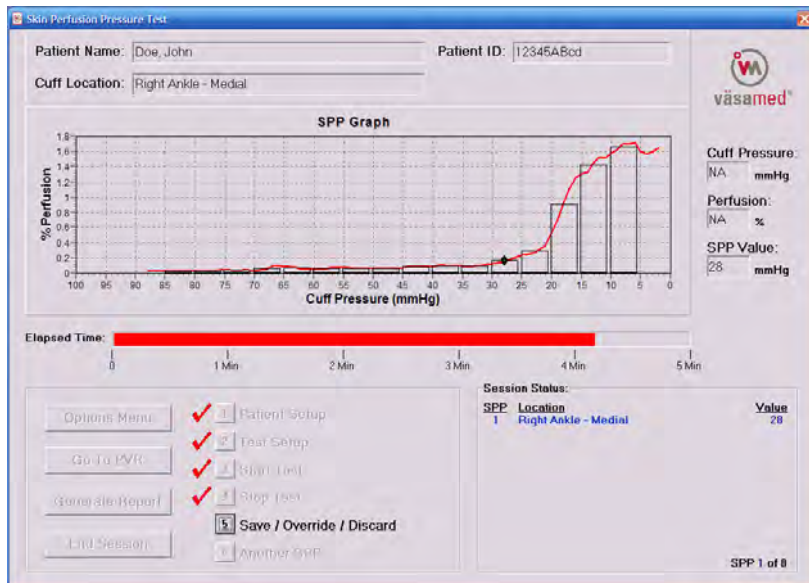


The SensiLase® System performs two noninvasive vascular tests that assess micro- and macrocirculatory of patients' lower extremities.

## Skin Perfusion Pressure (SPP): a measurement of reactive hyperemia for microcirculatory assessment



The SPP test provides a fully automated and quantitative evaluation of microcirculatory perfusion in the skin. The SPP test measures skin perfusion using a laser Doppler sensor located beneath a pressure cuff. During an SPP test, the pressure cuff is automatically inflated until the SensiLase System determines that perfusion beneath the cuff has stopped. The pressure is then automatically released at a controlled rate while the cuff pressure and skin perfusion are measured (reactive hyperemia). A graph displays pressure and perfusion during cuff deflation and indicates the pressure at which skin perfusion is found to return.

## Pulse Volume Recording (PVR): macrocirculatory assessment



The PVR test provides an indication of peripheral arterial disease (PAD) and other alterations in macrocirculation using air plethysmography (volume plethysmography). The PVR test is fully automated and uses a partially inflated pressure cuff to apply slight pressure to the limb. The impact of blood passing through the limb is transferred to the pressure cuff where it is measured as small changes in cuff pressure. The changes are displayed as a PVR waveform.

# SensiLase® System



## Waveform Analysis

- Skin Perfusion Pressure (SPP)
- Pulse Volume Recording (PVR)

## Laser Doppler

- Power Exiting LSA: 2.3mW typical; 2.55 mW maximum
- Laser Wavelength: 785nm
- Invisible Laser Radiation – Must not be viewed directly with optical instruments (magnifiers)

## Classifications

- Laser - Class 1M per IEC 60825-1
- Equipment Classification – Type BF

## Signal Processing

- Noise reduction algorithm
- Programmable data acquisition settings

## Patented Technology

SensiLase System and methods are covered by the following U.S. patents and foreign equivalents: 5,654,539; 6,178,342 and 7,736,311. Other patents are pending.

This material is for a general overview of product information; see operator's manual for detailed information regarding instructions for use, indications, contraindications, warnings and precautions. Clinical studies are available upon request.

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## Reporting

- Detailed report with patient information, SPP value and graphs, PVR waveforms, customizable with test comments and facility information

## Data Export

- Test report storage in PDF format for offline review, archiving and electronic transfer

## User Interface

- Laptop computer with color display

## Operating System

- Windows® XP

## System Inputs / Outputs

- USB
- Ethernet
- Wi-Fi wireless network connection

## Performance

- Applied Cuff Pressure: 0 to 250mmHg
- Pressure Accuracy:  $\pm 3$ mmHg from 0 to 200mmHg or 2% of the reading above 200mmHg
- PVR: 1 to 30 Hz frequency response

## Printer

- Standard USB color inkjet

## Electrical Power

- 100/120V; 50/60 Hz; 2.5A (maximum)
- Isolation Transformer: 300VA
- AC Power Cord, Hospital grade

## Environmental

- Operating temperature: 5 to 40° C (41 – 104° F)
- Operating humidity: 15% to 95%, non-condensing
- Transport & storage: - 20 to 60°C (- 4 – 140° F)

## Test Platform

(Roll Stand, Acquisition System and Laptop Computer)

- Size: (WDH) 58x67x103 cm (23x26.5x41 in.)
- Weight: 40.5 kg (90 lbs.)