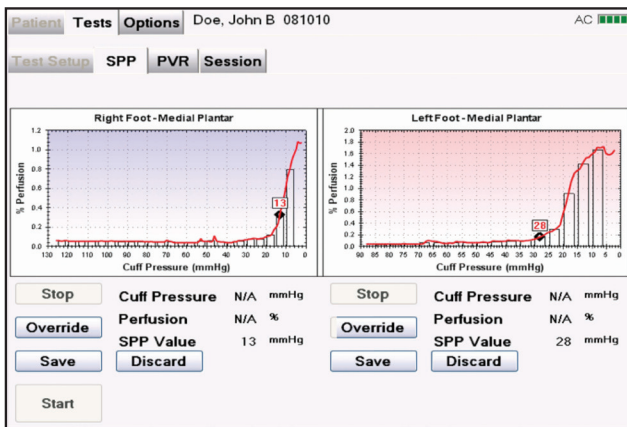


The SensiLase® PAD-IQ supports three noninvasive vascular tests that assess micro- and macrocirculation of patients' extremities.

Skin Perfusion Pressure (SPP) 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 (the Laser Cable) and a pressure cuff to evaluate reactive hyperemia. This type of provocative functional maneuver requires that the pressure cuff is first automatically inflated to occlude arterial bed blood flow; this is verified by the SensiLase PAD-IQ which determines that perfusion has stopped. The pressure is then automatically released at a controlled rate while the cuff pressure and skin perfusion are measured. 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) for macrocirculatory assessment



The PVR test measures and displays a waveform representing variations in the volume of blood passing through a limb during each cardiac cycle. 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. The PVR test is sometimes referred to as air plethysmography or volume plethysmography.

Ankle Brachial Index (ABI) Calculations

Doppler ABI uses pressures from the posterior tibial, dorsalis pedis and brachial arteries. PAD-IQ can be used to automatically fill and empty pressure cuffs to assist in acquiring pressure values (mmHg), document each arterial pressure and automatically calculate final indices.



Supports – Dual Channel

- Skin Perfusion Pressure (SPP)
- Pulse Volume Recording (PVR)
- Ankle Brachial Index (ABI) Calculation
- Peripheral Pressure Measurement

Laser Doppler

- Power Exiting Laser Cable: 2.35mW typical; 2.55 mW maximum
- Laser Wavelength: 785nm
- Invisible Laser Radiation

Classifications

- Laser – Class 1 per IEC 60825:2007
- Equipment Classification – Type BF

Signal Processing

- Noise reduction algorithm
- Programmable data acquisition settings

Patented Technology

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

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.

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Reporting

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

Data Export

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

User Interface

- Touch screen with color display

Operating System

- Windows® XP Embedded

System Inputs / Outputs

- USB
- Ethernet
- Wi-Fi 802.11 wireless network connection
- Bluetooth

Performance

- Applied Cuff Pressure: 0 to 250mmHg
- Pressure Accuracy: ± 3 mmHg from 0 to 200 mmHg or 2% of the reading above 200 mmHg

Printing

- Wireless by 802.11 and Bluetooth

Electrical Power

- 100-240VAC, 50/60 Hz 1A
- Use 120VAC for operation in U.S.
- AC Power Cord, Hospital grade

Environmental

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

PAD-IQ Instrument

- Size: (WxDxH) 23 x 19 x 25 cm (9 x 7.5 x 10 in.)
- Weight: 4.5 kg (10 lbs.)
- Built-in Carrying Handle