

PeriFlux System 5000

Peripheral pressure measurements - toe, ankle, limb, finger

Toe and ankle pressure measurements, including calculation of **ankle/toe-brachial index (ABI/TBI)**, are well established, objective tests for diagnosis and management of peripheral arterial disease (PAD) and critical limb ischemia (CLI).¹ These tests also give valuable clinical information for the evaluation and planning of revascularization procedures. Toe pressures are of particular importance in patients suffering from arterial calcification, a condition which often leads to falsely elevated ankle pressure values and a subsequent under-diagnosis of disease.



PeriFlux System 5000 provides your staff with a **simple, non-invasive** solution for assessing peripheral pressures in patients with suspected PAD.

Procedure:

1

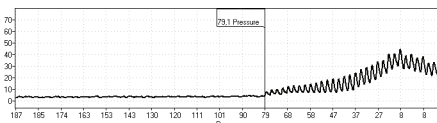
Attach Cuffs and Laser Doppler Probes

- ✓ Small probes for easy positioning
- ✓ Simultaneous reading at several sites
- ✓ Range of cuffs and probes

2

Perform Measurement

- ✓ Less than 2 minutes per assessment



3

Automatic Generation of Reports

- ✓ Calculation of ABI/TBI
- ✓ Exportable
- ✓ Printable

Sensitive at Low Pressures

The **PeriFlux System 5000** uses *laser Doppler technology* to measure systolic toe and ankle blood pressures. Laser Doppler has proven to be more sensitive than photoplethysmography in the low pressure range and does not require pulsatility.² The procedure involves placing an appropriate cuff on the toe/limb and a laser Doppler probe distal to the cuff. The cuff is first inflated to a pressure well above the systolic blood pressure, and is then deflated linearly until the laser Doppler probe detects the return of blood perfusion. The pressure at the return of the blood perfusion is equivalent to the systolic toe or ankle pressure.

Simple Solution for Cold Ischemic Feet

It may be difficult to assess toe pressures in patients with cold, ischemic feet. Therefore many vascular labs routinely warm the feet of their patients using IR lamps, foot baths or other methods. The **PeriFlux System 5000** offers an alternative solution. By extending the system with a PF 5020 Temperature Unit and using a combined heat and laser Doppler probe, it is possible to heat the skin locally at the measurement point to a specific temperature and avoid time-consuming, inexact traditional methods.

Flexible Solution for the Vascular Lab

The **PeriFlux System 5000** is a versatile system that provides the user with several options to investigate and diagnose the status of the peripheral circulation both on a macro- and a microcirculatory level. In addition to peripheral pressures, it is possible to measure *Pulse Volume Recording (PVR)*, *Skin Perfusion Pressure (SPP)* and *Post-Occlusive Reactive Hyperemia (PORH)*.³ Furthermore, the system is modular and can easily be expanded to include other functionalities such as transcutaneous oxygen⁴ and heat provocation.⁵



3-channel PeriFlux System 5000 including automatic cuff inflator for measurement at three sites simultaneously.

PeriFlux System 5000

- ✓ Accurate at low pressures
- ✓ Flexible and expandable, number of simultaneously measured sites can easily be increased
- ✓ Simple and robust, only one operator necessary

1. TASC II. Eur J of Vasc & Endovasc. Surgery, 2007 vol 33 suppl 1

2. The Usefulness of a laser Doppler in the measurement of toe blood pressures. Graaf et al J Vascular Surg 2000;32:1172-9

3. Statins enhance postischemic hyperemia in the skin circulation of hypercholesterolemic patients. Noll et al. J Amer College of Card 2003 42; 1:71-77

4. Wound Care Practice. Edited by P.J Sheffield et al, Best Publishing Company, 2004 p117-156

5. In vivo mechanisms of cutaneous vasodilation and vasoconstriction in humans during thermoregulatory challenges. Kellogg DL, Jr J Appl Physiol 2006;100:1709-1718

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