

PeriFlux 6000

Comprehensive vascular assessment



Saving limbs, saving lives, reducing human suffering

PeriFlux 6000

PeriFlux 6000 leverages noninvasive laser Doppler and Clark-type sensors to measure and visualize blood perfusion and oxygen delivery.

Using advanced signal processing to ensure accurate measurement, PeriFlux 6000 supports a comprehensive range of established macro- and microcirculation measurements, delivering results in a comprehensive report.

Equipped with noninvasive sensors, it captures a wide range of critical vascular data, including toe pressure, segmental limb pressures, TcpO₂, and skin perfusion pressure (SPP).



One instrument, many limbs, many lives

We designed PeriFlux 6000 to align with best practices and meet the efficiency and accuracy demands of modern healthcare providers. Our solution delivers a comprehensive set of peripheral vascular measurements, easing the assessment and follow-up of patients with complex diagnoses.

For patients whose ankle and toe pressures cannot be assessed, the Global Vascular Guidelines [1] suggest alternative noninvasive methods, including skin perfusion pressure (SPP), transcutaneous oxygen pressure (TcpO2), and pulse volume recording (PVR). PeriFlux 6000 supports all these recommendations and more.

[1] The global vascular guidelines (GVG) on the management of CLTI (July 2019).

	Macrocirculation	Microcirculation
Lower arterial	Toe pressure and TBI	TcpO2 — baseline, oxygen challenge, and leg elevation
	Ankle pressure and ABI	Skin perfusion pressure (SPP)
	Segmental pressure	Laser Doppler with heat
	Pulse volume recording (PVR)	Post occlusive reactive hyperemia (PORH)
	Treadmill (exercise ABI)	
	Penile pressure	
Upper arterial	Finger pressure	TcpO2 baseline
	Raynaud's syndrome	Skin perfusion pressure (SPP)
	Thoracic outlet syndrome	Laser Doppler with heat

Designed for clinicians

You can configure PeriFlux 6000 to match your measurement needs by choosing the appropriate exams from the full list. The user interface guides you through the entire measurement process.

For pressure measurements, the system automatically identifies the point of blood flow return following an occlusion and places a flag at that point. You can manually adjust the flag's position if needed.

To help with patient prep, pressure tubes and TcpO2 electrodes are color-coded, matching the graphs visualized in the user interface and in the report.

All measurements — and any images you take for documentation purposes — are conveniently packaged in a comprehensive report, which can be securely transferred to other systems using DICOM/HL7.



Sensors



Thermostatic laser Doppler probes

Our noninvasive thermostatic laser Doppler (LD) probes help standardize perfusion measurements by heating the measurement site to 40°C.

Heating the skin in such a systematic way lowers measurement variability caused by underlying conditions such as ischemia, which is often accompanied by cold feet. It also removes the need to pre-prepare with warm foot baths or blankets.



TcpO2 electrodes

PeriFlux 6000 uses Clark-type electrodes to measure TcpO₂. Placed on the measurement site with self-adhesive (single use) fixation rings, these noninvasive sensors heat the site to encourage available oxygen in the microcirculation to diffuse through the skin.



Laser Doppler probes for SPP

Our laser Doppler probes for SPP are noninvasive and can be easily placed on the measurement site using double-sided tape.

For accurate SPP readings, cuffs should be placed so that the SPP probe is in the middle of the cuff.

Application areas



Diabetic foot

PeriFlux 6000 supports established clinical metrics, including TcpO₂, toe pressure, ABI, TBI, and skin perfusion pressure (SPP) with high sensitivity — providing a comprehensive and objective overview of the patient in a single visit.

Heated laser Doppler probes for sensitive toe pressure measurement [2].



Peripheral artery disease

Early detection and accurate monitoring are critical for managing this chronic condition. As a noninvasive diagnostic solution for macro- and microcirculatory assessment, PeriFlux 6000 is designed to facilitate disease assessment, progression tracking, and treatment efficacy.



Wound healing

PeriFlux 6000 offers insights into tissue health and healing potential beyond visual assessment. When it comes to methods, TcpO₂, toe pressure, and SPP are recommended in major international guidelines as an effective tool for wound healing prognosis.

[2] Settembre, N., Kagayama, T., Kauhanen, P., Vikatmaa, P., Inoue, Y., & Venermo, M. (2018). The Influence of Heating on Toe pressure in Patients with Peripheral Arterial Disease. *Scandinavian journal of surgery : SJS : official organ for the Finnish Surgical Society and the Scandinavian Surgical Society*, 107(1), 62–67. <https://doi.org/10.1177/1457496917705994>

Packages

* All macrocirculation pressure exams listed on page 3

** Synchronous index measurements:

ABI and TBI are calculated from arm and toe/ankle pressures measured at the same time under the same physiological conditions.

					
	Microcirculation Essentials	Microcirculation Essentials+	Omni Essentials	Omni Essentials+	Omni Pro
Bilateral TcpO2	✓	✓	✓	✓	✓
Bilateral skin perfusion pressure (SPP)	✓	✓	✗	✓	✓
Bilateral TcpO2 — 2+ levels	✗	✓	✗	✓	✓
Macrocirculation pressure exams*	✗	✗	✓	✓	✓
Synchronous index measurements**	✗	✗	✗	✓	✓
Bilateral TcpO2 — 3+ levels	✗	✗	✗	✗	✓

About Perimed

With over 40 years of experience and unique competence in measuring blood perfusion with laser-based technologies, Perimed is a leader in medical solutions that generate insights to aid peripheral vascular diagnosis. We have over 4,000 installed instruments worldwide, operating in wound care departments, diabetic foot clinics, vascular centers, labs, and radiology — saving limbs, saving lives, and reducing human suffering.

perimed-instruments.com

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