

vasoquant[®] 1000 D-PPG

Quantitative
Photoplethysmography

Single channel Photoplethysmograph
Automatic Calibration
Automatic Analysis
Simple Operation
Patented



LRR

VQ1000 D-PPG

In 1981, LRR (light reflection rheography) was developed in Germany as a method to diagnose venous insufficiency. With appropriate wavelengths and well designed radiation geometries, changing amounts of blood in the superficial veins can be recorded.

Changing reflectivity of the skin within the measurement area is evaluated. As a result of the patient's calf muscle contraction, venous bloodflow is increased and the peripheral venous pressure decreases. After the phase of movement a leg refilling phase starts, caused by the arterial blood inflow.

The D-PPG method is a consistent and patented advanced development of the LRR method.



An automatic calibration before each measurement ensures the adaptation to different skin structures and skin pigmentations.

The venous pump power (curve amplitude) is now independent from initial blood circulation and becomes reproducible and quantitative recordable.

The D-PPG-device supports the examination with optical and acoustical metronome signals (for the patient's exercises) and ensures a time-saving and error-free examination.

Before each examination the D-PPG runs a self test.

A special sensor head records the blood filling of the cutaneous veins in a depth-optimized way.

Simple handling is ensured by the structured menu-driven operation and an integrated learning program.

Measurement results, menus and the charging status of the battery are shown on the display. Previous examination results are saved automatically.

The integrated sleep function ensures a long-lasting operating time.

You can use the versatile D-PPG device for

- Measurement of venous function, quantifying venous pump power of the calf muscle
- Differentiation between healthy and pathologic venous states
- Determination of degree of venous insufficiency
- Rapid diagnosis of venous function in high risk patients
- Ability to follow progression of venous pathology
- Evaluation of leg pain with uncertain origin. Assessment of need for surgical or medical intervention

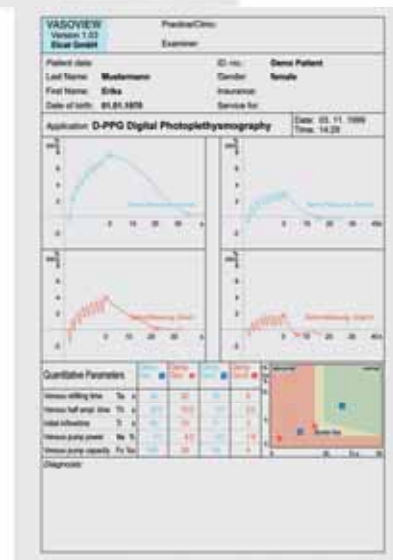
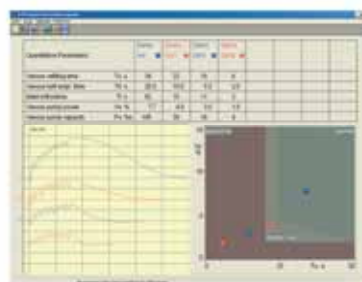
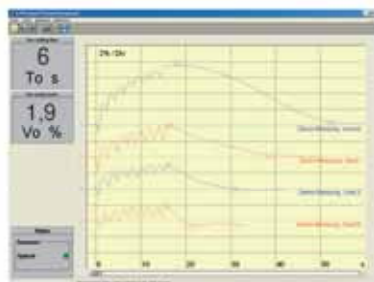


Everything in one case...

- D-PPG device
- Thermal printer
- Battery charger
- Connection cable (to printer)
- 1 box of adhesive collars;
6 rolls of thermal paper (approx. 500 measurements)
- Manual

vasoview® (Option)

The vasoview® software (Windows) connects the D-PPG device to your PC. Examination results may be displayed online or transferred to the PC later. For documentational purposes and controlling matters the examination results are recorded and stored in the data base special interfaces provide individual data management.



VQ1000 D-PPG technical data (technical specifications are subject to change without notice)

Device	Sensor	Charger
Dimensions	Dimensions	Line voltage
190 x 90 x 35 mm (L x W x H)	25 x 10 mm (D x H)	230 VAC / 50 Hz 110 VAC / 60 Hz optional
Weight	Weight	Power dissipation
approx. 740 g	approx. 7 g	11 VA
Powersupply	Electronic	Charge voltage
Rechargeable Battery; charging electronic prevents overcharging and deep discharge.	Low-noise signal preamplifier	12 V

Tourniquet cuff (optional)

Width	Length	
3 cm	45, 60 and 90 cm, adjustable by Velcro fastener	

vasoview® (optional) technical data

Components	System requirements	
Software	Processor	Interface
CD	Pentium or higher	one free serial port (COM1 to COM4) or USB Port with adapter
Cable	Harddisk	Operating system
Connection cable VQ1000 / Workstation	minimum 5 MB free disk space	Windows 9x, XP, 2000
Others	Database	Database Interface
Installation and operation manual	approx. 5 KB per measurement approx. 1 KB per patient.	GDT / BDT

Are you interested in the vasoquant 1000 D-PPG?

Call us for further information!

We would be pleased to tell you more about the vasoquant 1000 D-PPG!

ELCAT GmbH
medical systems

Bgm.-Finsterwalder-Ring 27
82515 Wolfratshausen
Germany
ISO 13485:2003

Phone +49 08171 4214-0
Fax +49 08171 4214-49
E-Mail info@elcat.de
Homepage www.elcat.de

represented by