

LIGHT-REFLECTION-RHEOGRAPHY

LRR

2-CHANNEL-SYSTEM

NON-INVASIVE
SELF-CALIBRATING

AUTOMATED

DIGITAL

**USB DRIVEN** 

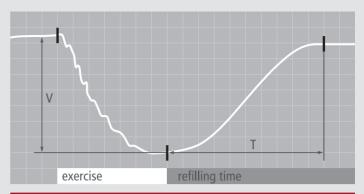


## **MEASURING METHOD**

The skin is illuminated by invisible infrared light. Blood absorbs this light much better than other tissue. Therefore, the reflected light, measured by the sensor, directly corresponds to the blood content in the examined skin area.

In case of light-reflection-rheography (LRR) the change of the venous blood in the vessels of the skin is analysed, which directly depends on the venous blood pressure in the larger vessels of the extremity.

At the beginning of the test the muscle pump empties the veins (Tip-Toe-Test). This process and the following refilling phase are recorded and analysed and allow the diagnosis of venous insufficiencies as well as providing information about the efficiency of the muscle pump.



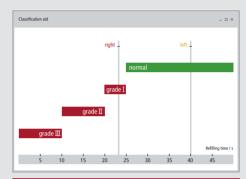
Recording of venous pump volume V and refilling time T

## **DEVICE CONFIGURATION**

The VenoScreen device is USB driven and is for use with a computer on which a Windows software is installed. The VenoScreen software controls the measurement process, automatically evaluates the results and includes a patient data base.



Measurement screen



**Evaluation screen** 

## **TECHNICAL DATA**

**Measurement Principle** Photo-Plethysmography (PPG) | Light-Reflection-Rheography (LRR / D-PPG)

**Measurement Channels** 2 x LRR / D-PPG **Power Supply** via USB port

**Dimensions | Weight**  $w \times h \times d$ 100 x 35 x 160 mm / approx. 300 g

Safety

Medical Device Directive Class II a

IEC / EN 601-1 (Class II, Type BF) | IEC / EN 601-1-2 | 4 kV insulated | CE 0197 Standards

**PC** Requirements Operating System Windows

> RAM > 512 MB HDD > 40 GB Interface USB

> > AUTHORISED DISTRIBUTOR