



Highlights

- Fast, contactless, radiation-free measurements
- Quantification of perfusion and oxygenation over larger areas, representation of the measured values in 2D
- Unique, highly integrated system with camera and analysis / documentation software
- False color images for the presentation of oxygenation, Hemoglobin Index, NIR Perfusion Index and Water Index of the tissue
- Various functions for research purposes; e.g. PCA, correlation
- High resolution, imaging measurements in the spectral range 500 - 1000 nm [VIS + NIR]
- Breakthrough chemical color imaging technology

Advantages

- Improved quality of medical care
- Objective documentation - also over time
- Validation of new treatment approaches
- Shorter reaction times to initiate preventive activities
- Faster healing & recovery results for patients possible
- Time & cost efficient
- Minimal risk of infections & biological danger due to contactless measurement
- No consumables, easy maintenance



Why not start a conversation today?

Find further information

www.diaspective-vision.com

Contact us

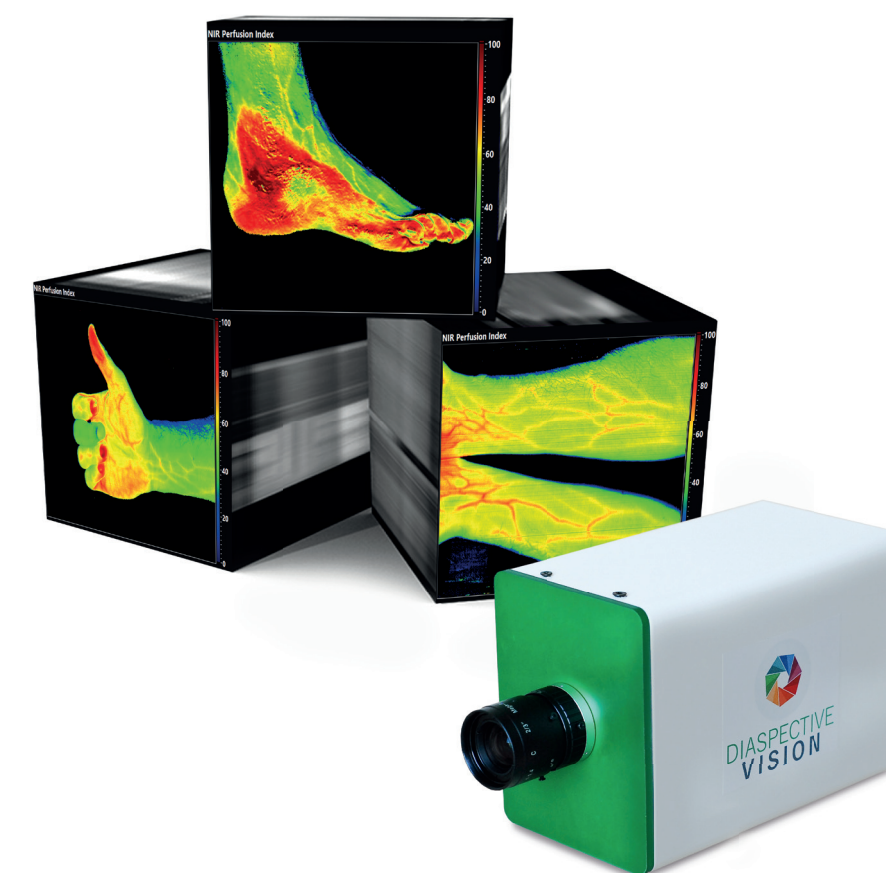
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TIVITA® Tissue

The Hyperspectral Tissue Camera for Objective Measurements of Physiological Parameters



Made in Germany



TIVITA[®] Tissue System

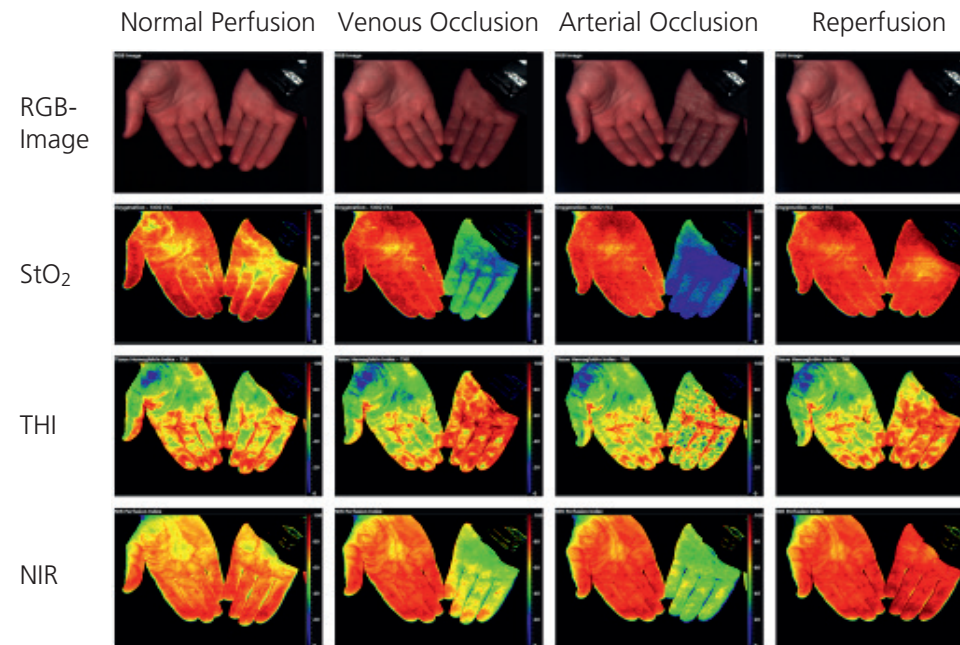
Cutting edge - objective and easy to handle

Fields of application of perfusion imaging and analysis

- Skin transplants
- Problematic wounds
- Diabetic ulcers
- PAD
- Angiology

Biomedical and clinical research

- Extraction of quantitative description parameters
- Hyperspectral based PCA and correlation
- Validation of new treatment approaches



RGB color image

The red-green-blue color image is extracted of the recorded data and a normalized color image.

Oxygenation (StO₂)

The parameter describes the relative oxygen saturation of the blood in the microcirculatory system in superficial tissue layers. The penetration depth is about 1 mm.

Tissue Hemoglobin Index (THI)

The THI describes the existing hemoglobin distribution in the micro-circulatory system of considered tissue area. This is an index and not an absolute value.

Near-infrared (NIR) Perfusion Index

The parameter describes the relative oxygen saturation of the blood in microcirculatory system in deeper tissue layers. The penetration depth can be 4-6 mm. This is an index and not an absolute value.

Tissue Water Index (TWI)

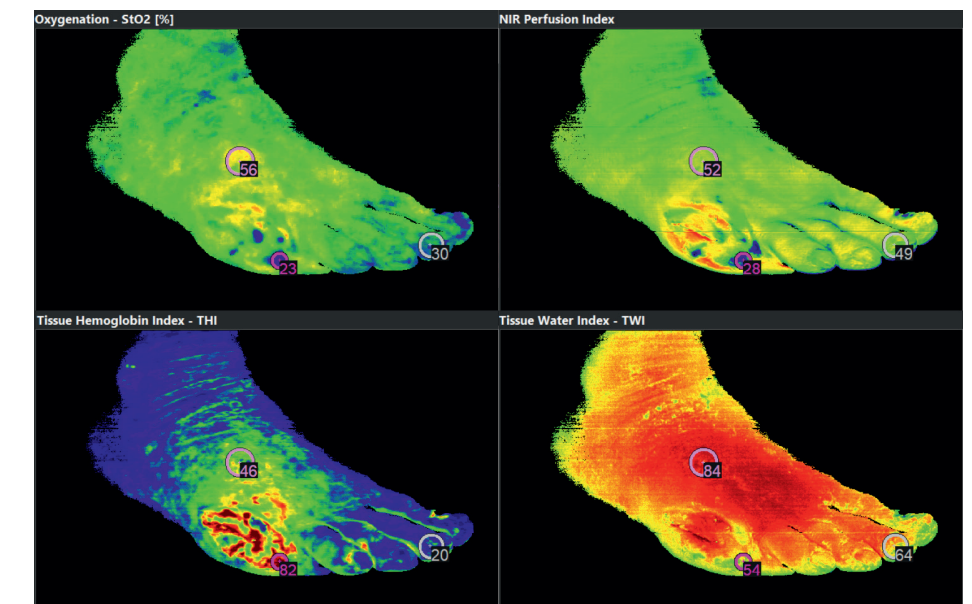
The TWI describes the existing water distribution in the considered tissue area. This is an index and not an absolute value.

When a larger surface matters

The TIVITA[®] Tissue is an innovative imaging technology for the easy and flexible assessment and documentation of tissue areas. It allows a non-contact, non-invasive recording of various parameters such as e.g. tissue oxygenation and perfusion within a few seconds. The reception area can reach over whole body parts.

The TIVITA[®] Tissue System uses the hyperspectral imaging technology. The visible (VIS) and near infrared (NIR) spectral range is recorded by the image acquisition system. It is like an imaging tissue oximeter and relies on the latest advantages in hyperspectral imaging. Instead of a single-spot-reading the system produces a 2D area map of each parameter.

For the measuring procedure, the TIVITA[®] Tissue is placed approx. 50 cm above the subject to record the hyperspectral data. The analyzing software processes the acquired information and creates several pseudo-color images depicting Tissue Oxygenation, Tissue Hemoglobin Index, NIR Perfusion Index and Tissue Water Index.



Pseudo-color images of the TIVITA[®] Tissue Camera with numerical evaluation