# VivaScope® 1500/3000

IN VIVO Confocal Laser Scanning Microscope (830 nm)

- Optical biopsy
- Non-invasive
- Real-time imaging

The **VivaScope 1500** offers physicians, clinicians as well as medical and cosmetic researchers the possibility to examine skin in vivo, at cellular resolution, in real time.

The **VivaScope 1500** provides a non-invasive view into the epidermis all the way down to the superficial dermis.

A near-infrared laser (830 nm) penetrates the superficial layers and is reflected by components of the skin. The strongest reflection is observed with melanin and keratin due to their high refractive indices. The reflected light is captured by the microscope and translated into grayscale images of the different layers of the skin. The high resolution of the images allows investigators to evaluate individual cells in horizontal optical sections.

The **VivaScope 1500** is well-suited for a wide variety of medical and cosmetic applications. Therefore, it has become increasingly popular in many clinics, dermatology offices, cosmetic and pharmaceutical companies as well as research organizations. The latest generation **VivaScope 1500** features a new core technology that significantly improves speed and quality of image acquisition. Examinations using the new device are three times faster than before.

Every **VivaScope 1500** is equipped with the **VivaCam®**, a professional digital dermatoscope, which generates images in HD quality.

The **VivaScope 1500** can be combined with the handheld **VivaScope 3000** as an add-on.



VivaScope® 1500 with VivaCam®





# ■ VivaScope® **3000**

#### Handheld Confocal Laser Scanning Microscope for in vivo use.

Due to its low weight (only 0.7 kg) and compact design, the latest generation handheld **VivaScope 3000** is especially flexible when it comes to challenging imaging locations.

The portable confocal laser-scanning microscope simplifies in vivo examinations of uneven skin areas especially in the face. It delivers stable, undistorted and clear images e.g. of the nose, the ears and other difficult to access regions.

The **VivaScope 3000** is highly suitable for investigating large skin areas affected by actinic keratosis or lentigo maligna. Pre-surgical mapping of lentigo maligna using the **VivaScope 3000** optimizes treatment and improves patient care management.

The handheld **VivaScope 3000** is available as stand-alone device or as add-on to the **VivaScope 1500**.



### Technical Data VivaScope® 1500 VivaScope® 3000

Optical resolution	horizontal	< 1.25 µm in center of image field	< 1.25 μm in center of image field
	vertical	< 5.0 µm in center of image field	< 5.0 μm in center of image field
Max. imaging depth		Superficial dermis	Superficial dermis
Viewable section	individual image	500 μm x 500 μm	750 μm x 750 μm
Max. mapped field		8.0 x 8.0 mm	unlimited
Image resolution		1024 x 1024 pixels (Nyquist-optimized)	1024 x 1024 pixels (Nyquist-optimized)
Image digitization		8 bits	8 bits
Frame rate		9 frames per second	6 frames per second
Monitor		23", 1920 x 1080 pixels, multitouch display	23", 1920 x 1080 pixels, multitouch display
Optical operating power		CDRH Class 1, EU Class 1M (max. 22 mW)	CDRH Class 1, EU Class 1M (max. 22 mW)
Imaging wavelength		830 nm	830 nm
Magnification		ca. 520x	ca. 350x
Objective		Caliber I.D. StableView™	Caliber I.D. StableView™
		30x magnification, 0.9 NA	30x magnification, 0.9 NA
		water immersion	water immersion
Operating temperature range		13°C to 30°C	13°C to 30°C
Power source		110 - 230 V, 50 - 60 Hz	110 - 230 V, 50 - 60 Hz
Weight		-	0.7 kg
Certifications		FCC Classe A, CE-marked	FCC Classe A, CE-marked

Technical specifications are subject to change without notice. Status 06/2018

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