

VISUCAM^{NM/FA}

**The Two-in-one Fundus
Camera System**



The Perfect Combination

The VISUCAM^{NM/FA} fundus camera is the perfect combination of a non-mydratic fundus camera with superior image quality and an easy-to-use camera for fluorescein angiography.

VISUCAM^{NM/FA}

The VISUCAM^{NM/FA} is enhanced with the hardware and software required to record, display and document fluorescein angiography. The VISUCAM^{NM/FA} offers everything needed for the detailed diagnosis of typical diseases of the eye, e.g. diabetic retinopathy, glaucoma and age-related macular degeneration (AMD). The camera documents the results and permits the subsequent management of the disease.

All-in-one system

The compact design comprises the internal camera sensor and the computer system, including the software with all relevant patient information and associated images. The all-in-one design enables fast and easy patient examination, while the integrated network capability permits efficient integration into the practice.

VISUPAC image archiving and management system

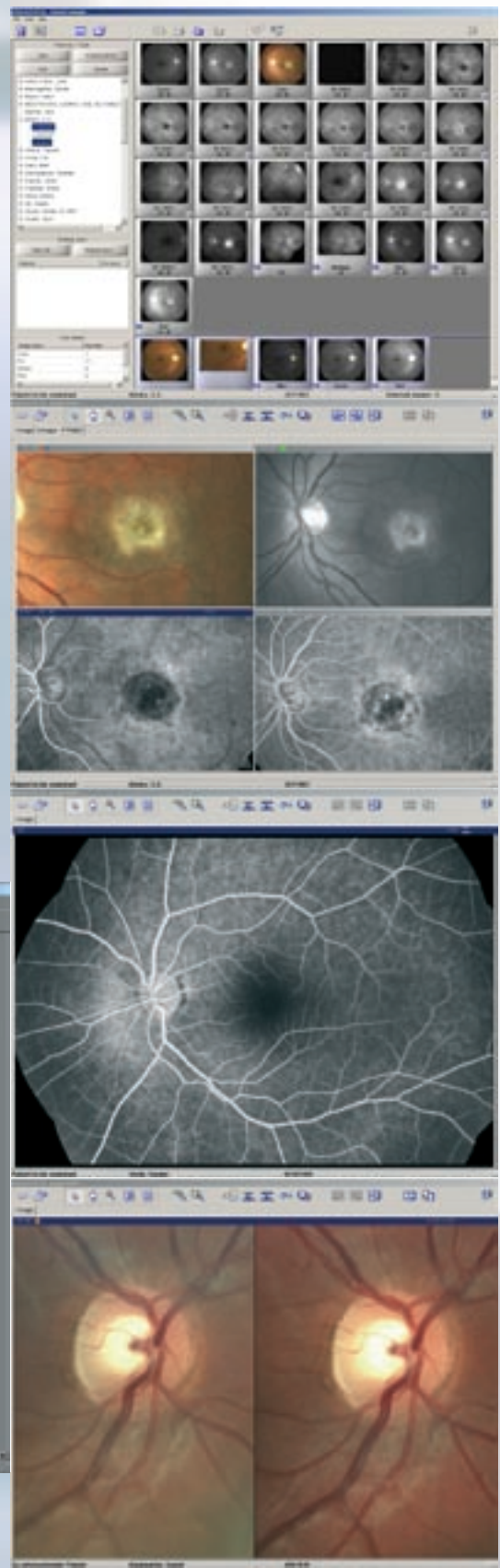
This is the professional addition to the internal VISUCAM^{NM/FA} software. Easily connected via a network, all images can be automatically transferred to the VISUPAC database.



Software functionality

Simple to use functions for image display and processing:

- Patient manager mode
- Capture mode
- Image viewer with Zeiss AutoMap and stereo display



Advanced Fluorescein Angiography

High resolution, high quality ZEISS optics

The integrated digital image sensor and optimized signal processing are the ideal foundation for high detail in the color images and angiography.

All capture modes for routine procedures

In addition to fluorescein angiography, the capture mode permits selection of the following image types:

- Color (for most documentation)
- Red-Free (sharper contrast of blood vessels)
- Blue (RNFL analysis)
- Red (choroidal imagery; nevus/tumors)

Pictures of the anterior segment can also be taken. An added benefit will allow the digital separation of the color photograph, resulting in a separate red-free, blue and red image.

Fast and easy documentation

The software-guided, intuitive operation and adjusting aids ensure that details are immediately visible on the TFT monitor – whether an angiography series or color images. All important captured data can be checked on the monitor at all times. The autoflash mode ensures correct exposure of images. Manual flash correction is not generally required.

45° and 30° pictures and multi-image montage

Through fixation guidance, the Zeiss AutoMap module quickly produces large overviews of all peripheral images from individual images. The relevant external and internal fixation positions can be freely selected. A number of programmed modes, which permit fast routine procedures, are available for internal fixation.

Small pupil mode

The small pupil mode provides additional possibilities if the pupils are not widely dilated. Even small pupils of only 3.3 mm enable you to take good color photos. However, there is little point in angiography without dilated pupils.

3D image capture mode

The optimum capture mode can be easily combined with various basic settings, making photography and subsequent analysis procedures markedly quicker. The stereo pair is saved in a file, and the VISUCAM software remembers each change.



Design Optimized for the Procedure

All-in-one design

A compact instrument with the full performance spectrum – from image capture to analysis – is the basis for improved procedures.

Major components

- Highly corrected optics with an integrated digital sensor
- Complete computer system & database, including intuitive software
- Easy image transfer in the network, via USB or DVD

Clearly structured and easy to use

High operating convenience ensures fast work. Decisive factors:

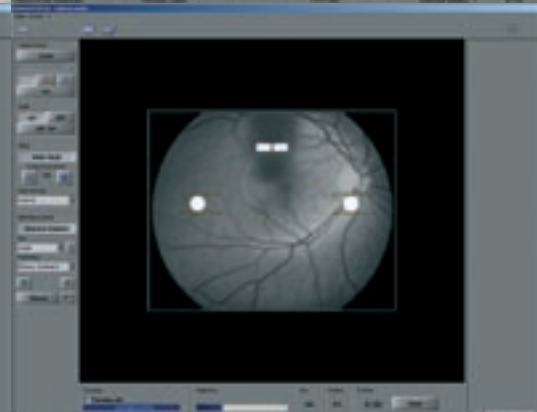
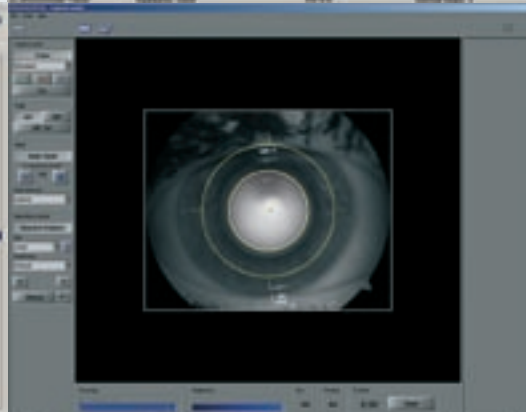
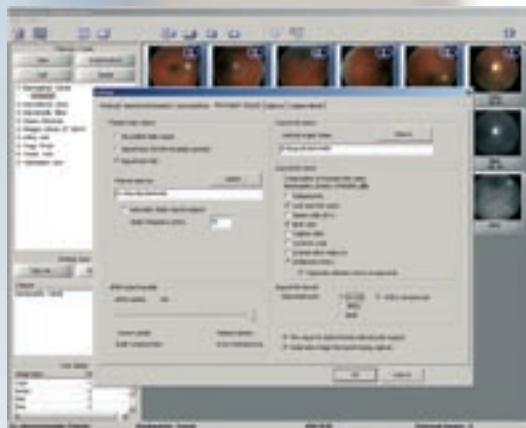
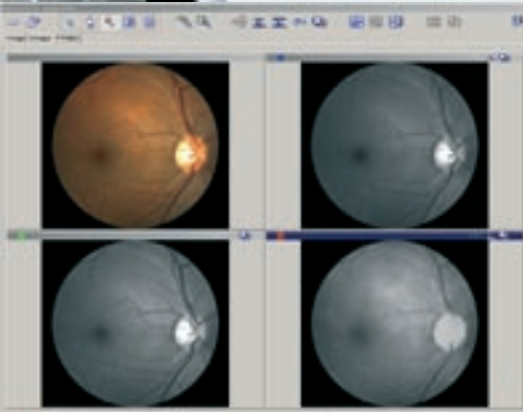
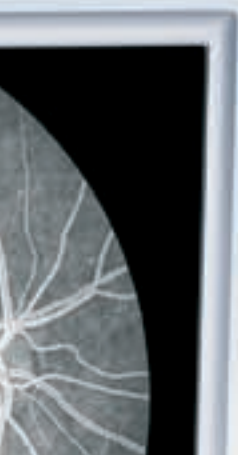
- Intuitive, simple software for each step
- User-optimized software settings thanks to a clearly arranged menu
- Positioning aid via working distance dots
- Focusing aid with coincidence line pairs

Good overview and fine details

The 19" TFT monitor shows every detail. It is at the center of each activity: patient data, instrument positioning or image display. Digital documents can be obtained very quickly. In the capture mode, for example, the image is displayed on the monitor, saved automatically and made available for image analysis as soon as the image is taken.

Practice software and PACS connection

Whether for image display and processing, printing or exporting, the VISUCAM software can do it all. For exports, the VISUCAM provides various image formats and interfaces which permit easy integration into practice networks or PACS systems. Archive image data in the network. DVD/CD or USB stick are useful for occasional exports. For simple networks and stand-alone systems, we recommend our VISUPAC for archiving.





Technical Data

Image capture

Field angle	45° and 30°
Capture modes	Color, red-free, blue and red pictures and pictures of the anterior segment, as well as fluorescein angiography
Filters	FA exciter and barrier filters, UV and IR barrier filters
Capture sequence	1.5 ... 2 seconds (depends on flash energy)
Compensation for ametropia	+35 D ... -35D, continuous

Pupil diameter	≥ 4.0 mm ≥ 3.3 mm (30° small pupil mode)
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Working distance	40 mm (patient's eye – front lens)
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Capture sensor	CCD 5.0 megapixels
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Monitor	19" TFT (1280 x 1024 pixels)
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Fixation	External and internal
Internal	Various programmed sequences or freely positionable; special attention mode

Flash energy	Xenon flash lamp, 22 flash levels
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Database	Patient information and images with field angle, FA time, R/L recognition and date of visit
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Computer

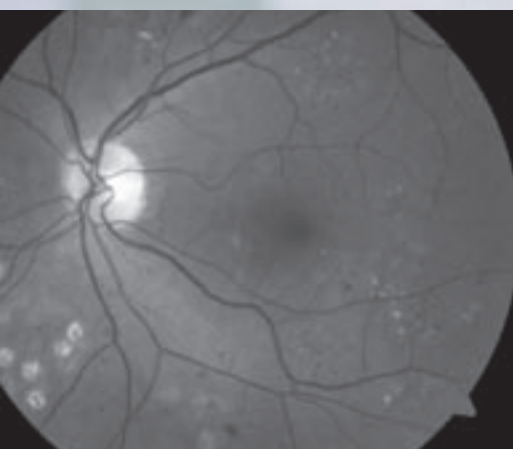
Operating system	Windows XP Professional
Hard drive	for storage of up to 60,000 images
Interfaces	USB ports and network connectors, VGA (digital)
Export/Import	image formats: DICOM, bitmap, jpeg Patient list DICOM MWL, DICOM storage
Internal DVD burner	UDF format (DVD, CD)

Dimensions	<i>LxWxH in mm (inch)</i>
Basic system	480 x 410 x 670 (18.9 x 16.1 x 26.4)
Monitor	406 x 332 x 69 (15.9 x 13.1 x 2.7)
Weight of basic system	30.0 kg (66.15 lbs)

Line voltage	100 – 240 V ± 10 % (self-adjusting)
Frequency	50/60 Hz
Power consumption	400 VA

Instrument table	Asymmetric, suitable for wheelchair
Accessories	USB printer USB memory stick VISUPAC archiving and image analysis system Network isolator





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