



OCULUS  
KERATOGRAPH

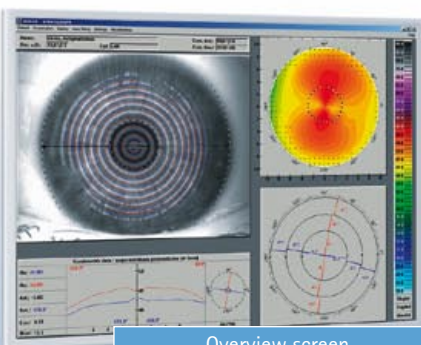


# OCULUS KERATOGRAPH

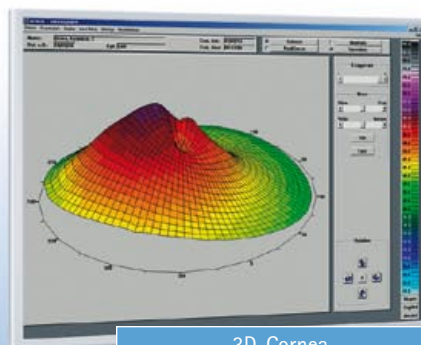
## 3 in 1 : Keratometer – Topograph – Pupillometer

precise, easy and intuitive

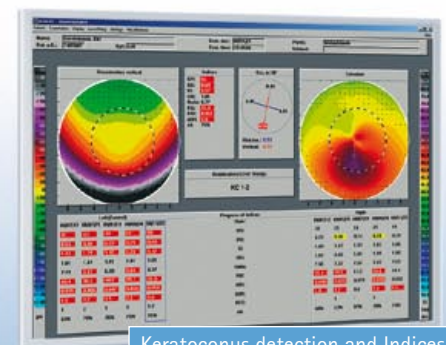
- Built-in keratometer and automatic measurement release guarantee reproducibility
- Extremely high resolution (*22,000 measuring points*) and digital image transmission for maximum accuracy
- USB-connection
- Short measuring time – fraction of a second
- The comfortable working distance reduces the influence of positioning tolerances
- Easy to operate in a Windows® screen environment
- Manual override functions to measure corneal defects
- Room to record individual comments
- Versatile forms of presentation
  - Overview
  - Sagittal/Axial
  - Tangential
  - Elevation
  - Keratoconus detection and quantification
  - Compare examinations
  - Fourier and Zernike analysis
- Running check-ups for refractive surgeons, contact lens fitting and Fourier-type lens analysis
- Network capable software allows to viewing of patient data in multiple locations
- Available for Laptop control (*type LC*), for mounting on a refraction stand or table controlled by desktop PC (*type E*)



Overview screen



3D-Cornea



Keratoconus detection and Indices

# OCULUS KERATOGRAPH

## + optional Pupillometer Software

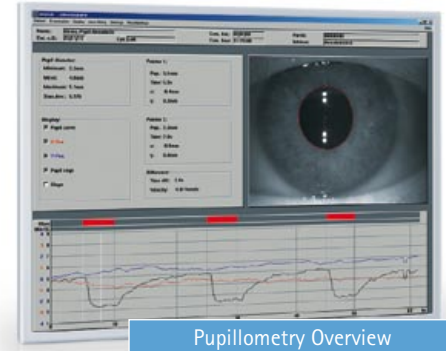
### measurement of the optical zone

Pupillometry, the indispensable tool for fitting multifocal and ortho-K-lenses as well as for choosing the best treatment zone for corneal refractive surgery.

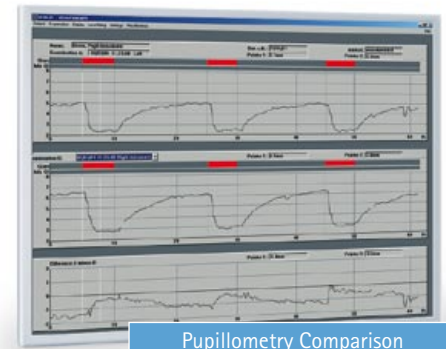
- Continuous measurement of the pupils size using the integrated infrared camera
- Four different examination programs
- Analyzing of the pupils reaction with and without glare and two different stimuli
- Various diagrams for analyzing



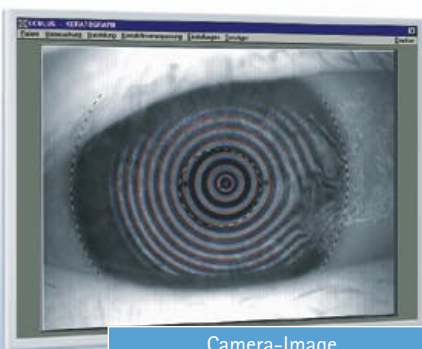
→ Refraction table Concepta with Oculus Keratograph



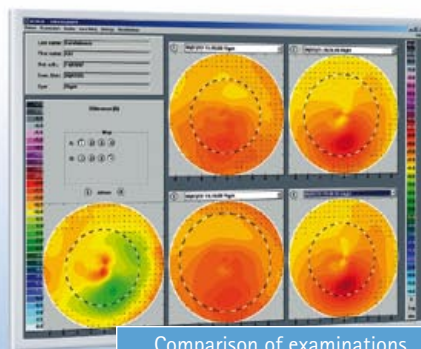
Pupillometry Overview



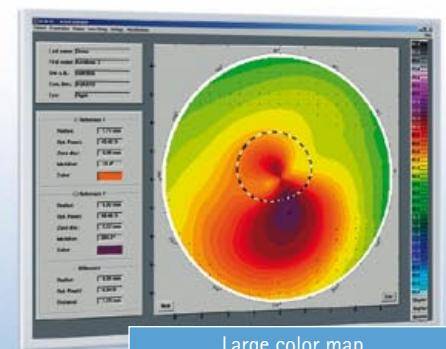
Pupillometry Comparison



Camera-Image



Comparison of examinations



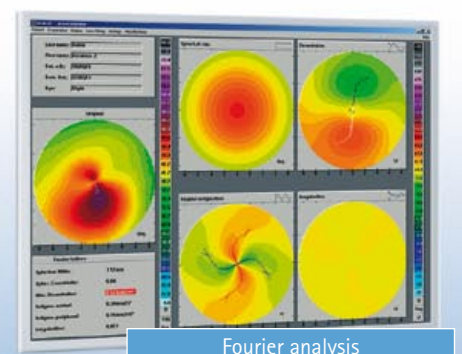
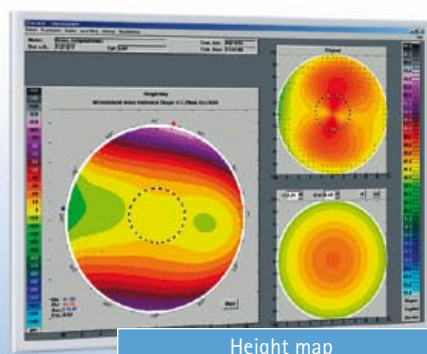
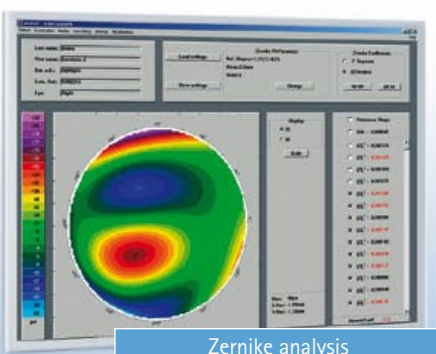
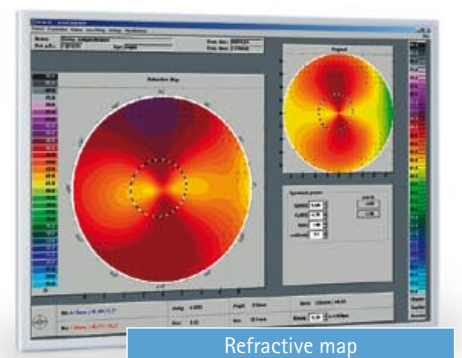
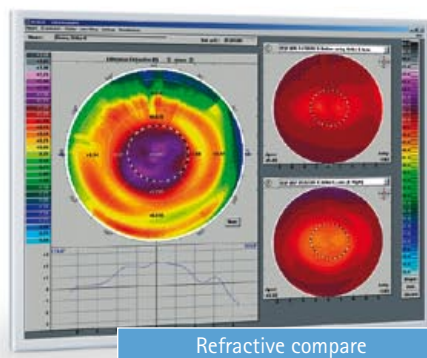
Large color map

# OCULUS KERATOGRAPH

## + Surgery

most accurate tool for refractive surgery

- Non-contact measurement at a hygienic working distance of 80 mm, more than 3.15"
- The large placido bowl best reflects the shape of the eyeball
- Fourier analysis to trace irregularities
- Zernike Analysis to trace irregularities of higher orders
- Interactive height (elevation) map, allows the individual selection of reference body radius and asphericity
- Refractive map to display the influence of aberrations
- Vertex power calculation module to adjust power basing on vertex distance at time of refraction
- Software module, developed by keratoconic specialist, provides early detection and complete diagnosis using Zernike polynomials

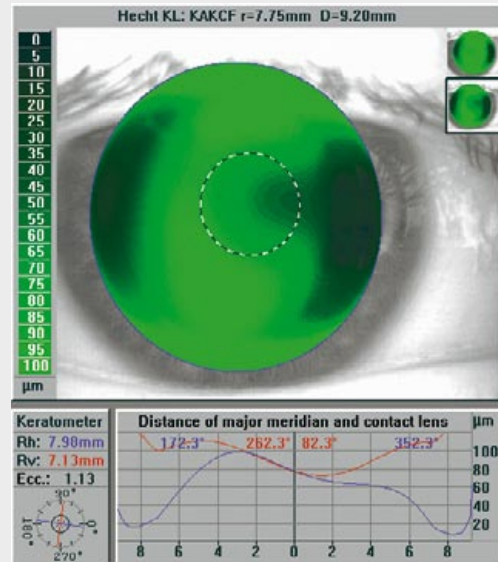


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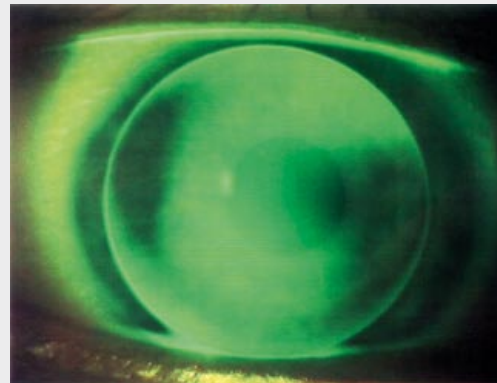
## + Contact lenses

comfortable and versatile

- Pre-programmed recommendations for soft and rigid lenses, open database for practice preferences
- Expandable database
- Customize lenses by choosing the mathematically ideal lens and edit its parameters
- Create your own line of lenses
- Fluorescein image simulation
- Measurement of rear surface of RGP-lenses allows lens manipulation verification
- Reduced chair time – increased patient satisfaction
- Refractive compare module to control the progress of wearing Ortho-K-lenses



↑ Compare Fluosimulation  
↓ with Slit-lamp photo



Fluo-Image simulation

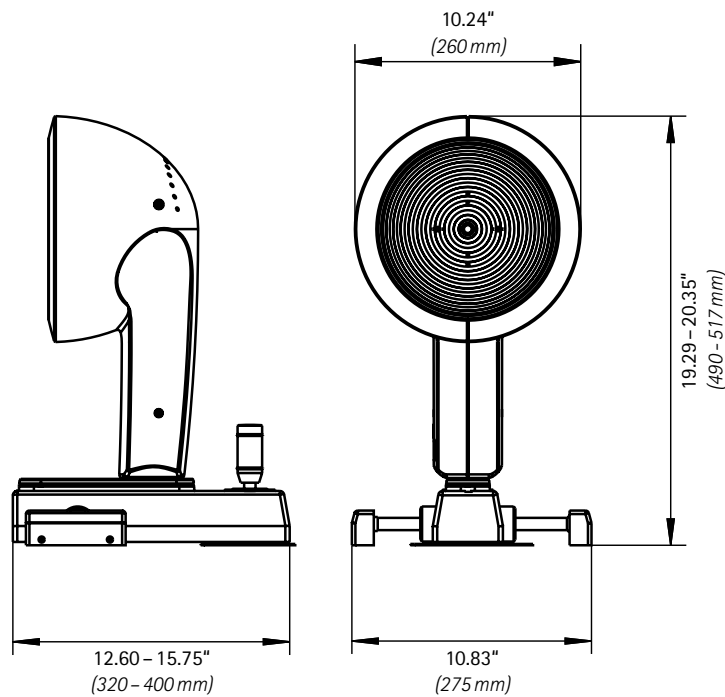


Refraction module

## Technical Data – Oculus Keratograph

Measurement range	0.118" – 1.496" (3 – 38 mm), 9 – 99 dpt
Accuracy	+/- 0.1 D
Reproducibility	+/- 0.1 D
No. of rings	22
Working distance	3.15" (80 mm)
No. of test points	22,000
Dimensions (H x W x D)	19.29 – 20.35" x 10.83" x 12.60 – 15.75" (49 – 51,7 x 27,5 x 32 – 40 cm)
Minimum PC requirements	Pentium III 1.5 GHz, Windows XP, 512 MB RAM, graphic board 1.024 x 768 Pixel, USB interface

CE According to Medical Device Directive 93/42/EEC



[WWW.OCULUS.DE](http://WWW.OCULUS.DE)



Oculus is certified by TÜV according to  
DIN EN ISO 13485:2003/DIN EN ISO 9001:2000

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