Corneal Topography

CA-200F



ACCURATE, HIGH RESOLUTION IMAGES OF THE ANTERIOR CORNEAL SURFACE

CA-200F

The Topcon CA-200F Corneal Analyser is an easy-to-use solution for the evaluation of the anterior corneal surface. In addition to curvature mapping, the CA-200F provides comprehensive software features, allowing for a complete analysis of the patient's cornea. The Topcon CA-200F provides fluorescein images and real time fluorescein films for contact lens fitting as well.

Precise corneal topography

The CA-200F is a placido-based topography system that delivers accurate, high resolution images of the anterior corneal surface. 24 rings measure over 10,000 data points. The Topcon CA-200F incorporates 8 Blue LED's for fluorescein images which are essential for contact lens simulation.







Pupillometry

The CA-200F incorporated static and dynamic pupillometry. Static pupillometry is performed under 3 light conditions, scotopic, mesopic and photopic. This feature provides information on the

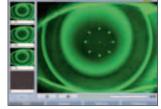


pupil diameter. During contact lens fitting simulation or the ablation for laser treatment, the CA-200F displays the pupil position and diameter in relation to the position of the contact lens or ablation area. Dynamic pupillometry is a fluent movement of the pupil in changing light conditions, during contraction from scotopic to photopic, during dilation from photopic to scotopic. Dynamic pupillometry provides clear information on the reaction time of the pupil and the contraction of the pupil.

Fluorometry

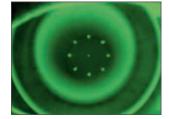
The CA-200F offers the eye care practitioner to capture real time fluorescein images of a contact lens on the cornea. The operator can carry out a complete contact lens fitting by using one single instrument! Real time fluorescein films allow the eye care practitioner to judge the movement of the contact lens on the cornea, the distribution of the tear film under the contact lens as well as the wetting of the outer contact lens surface. The corneal condition can be observed by recording a real time fluo film without wearing a contact lens. The tear film condition, corneal artifacts and break up tear time can be viewed.





Real time fluorescein image

Real time fluorescein film



Corneal & tear film condition observation

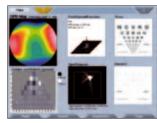
What makes the Topcon CA-200F unique:

- » Fluorometry
- » Pupillometry
- » Zernike analysis
- » Contact lens fitting simulation
- » IOL calculation
- » Intuitive workflow
- » Easy operation
- » Automated best image selection
- » Automated pupil recognition
- » Touch screen
- » Onboard software
- » WiFi connection

CAPABILITIES

Zernike analysis

The Zernike analysis consists of 36 polynomials into the 7th order. This feature provides information in the optical properties of the anterior surface of the cornea. The Zernike analysis provides a clear view on the



optical deficiencies which can disturb vision. Based on this information the CA-200F provides the visual acuity summary. Zernike analysis is the basis for the calculation of the ablation area for laser treatment.

Contact lens fitting simulation

The CA-200F is equipped with a contact lens database. The software automatically selects the best fitting contact lens. Modifications on the contact lens parameters can be made easily. Thanks to the option to input refractive powers, the contact lens proposal is accurate and complete. Simulation of the flourescein image is available in order to evaluate the lens fitting on the cornea. The comparison between different contact lenses is easy in order to ensure the best fit.

IOL calculation

The Topcon CA-200F incorporates an application for toric IOL calculation. In close cooperation with Oculentis, Topcon has created an onboard application for calculation for LENTIS Tplus, toric IOL. With this application you can easily determine the right toric IOL for your patient.

Intuitive workflow

The CA-200F has a clear screen layout which navigates the operator through the procedures, using a touch screen.

Touch screen

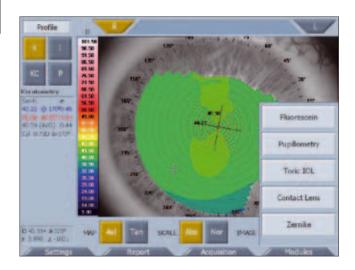
The integrated 8"touch screen provides quick navigation through the software, image acquisition and analysis.

Onboard software

The Topcon CA-200F includes a fully integrated PC, so no external PC is required. However for using a patient database an external PC with dedicated software is required.

Fast and Easy operation

Visual signals support fast and easy alignment and focusing on the patient's eye. The CA-200F has a Right / Left eye detection this prevents wrong savings in Right / Left eye measurements.

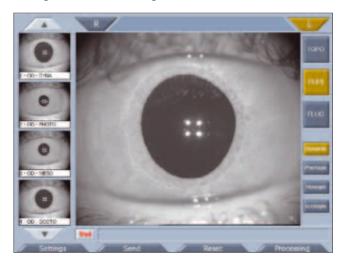


Automated best image selection

The automated best image selection modus in the software of the CA-200F decides the best focused position and automatically acquires the image.

Automated pupil recognition

During every measurement, the CA-200F automatically registers the pupil diameter, which is critical information during contact lens fitting.



WiFi connection

The Topcon CA-200F can communicate with an external PC using a WiFi connection also a LAN connection is available.

Specifications

Technical Specifications	
Keratoscope cone	24 rings equally spaced on a 43D sphere
Analyzed points	Over 100,000
Measured points	Over 10,000
Corneal coverage	From 0.3 (minimal diameter on a sphere of 43D) up to 10.5mm on a normal eye
Diopter power range	From 1D to over 120D
Resolution	± 0.01D, 1 micron
Accuracy/Precision Axial radius	± 0.03 mm altimetric data ± 2μm at 4 mm
Capture system	Auto-capture
Output port	USB
Environmental Conditions	
Working Environment	
Temperature	10-40°C
Relative humidity	30-75% (no dewing)
Atmospheric pressure	700-1060 hPa
Storage	
Temperature	10-40°C
Relative humidity	30-75% (no dewing)
Atmospheric pressure	700-1060 hPa
Electric Specifications:	
Power supply	AC 100-240V 47-63 Hz
Power consumption	<100 VA







IMPORTANT

Subject to change in design and/or specifications without advanced notice.

In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.

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