

# CA-800

Corneal Analyzer



# Easy-to-Use Corneal Topography and Dry Eye Workstation



**The CA-800** allows for complete evaluation of the anterior surface and tear-related structures.

## Overview



Topography,  
Corneal Wavefront  
(Zernike) Analysis



Tear Film Breakup  
Tear Meniscus Height/  
Blink Analysis



Meibomian Gland  
Analysis



White to White  
Measurement



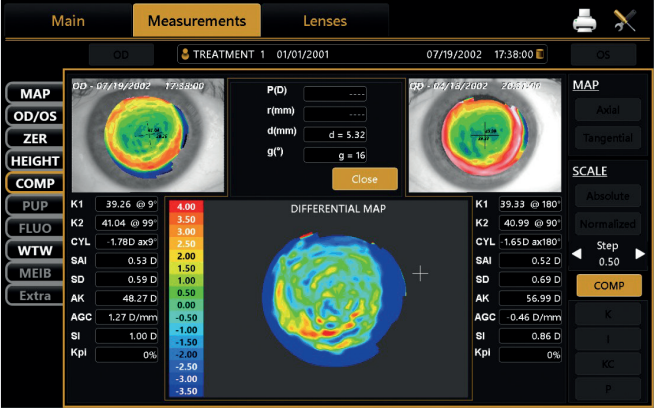
Pupillometry



Contact Lens Fitting  
Simulation

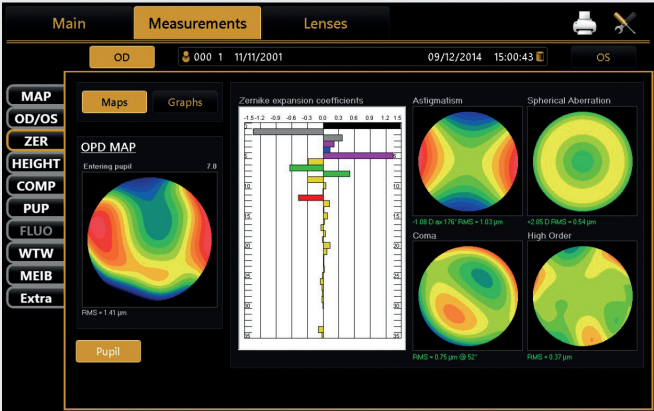
Corneal Topography with Comparison & Differential Map

Maps corneal curvature and visit-to-visit comparison, which provides valuable information to assess keratoconus probability and supports specialty contact lens fitting. The differential map allows observation of the effects of refractive surgery and orthokeratology lenses. White-to-white measurements are automatically calculated during topography to facilitate the selection of contact lens diameter.



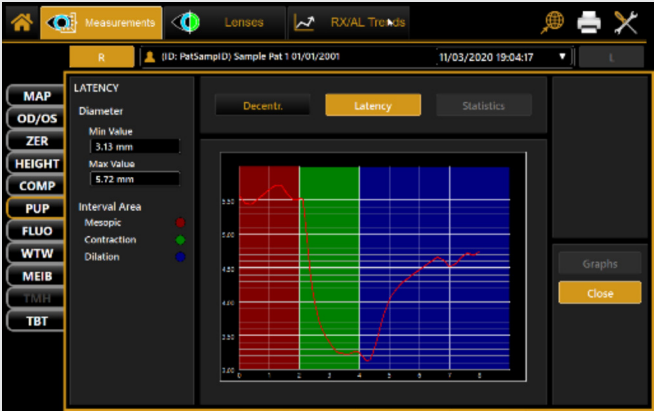
Corneal Aberration Summary

Displays maps of higher order aberrations of the eye over different pupil sizes and simulates the effect on the patient's visual quality, to enhance optical recommendations or contact lens parameters.



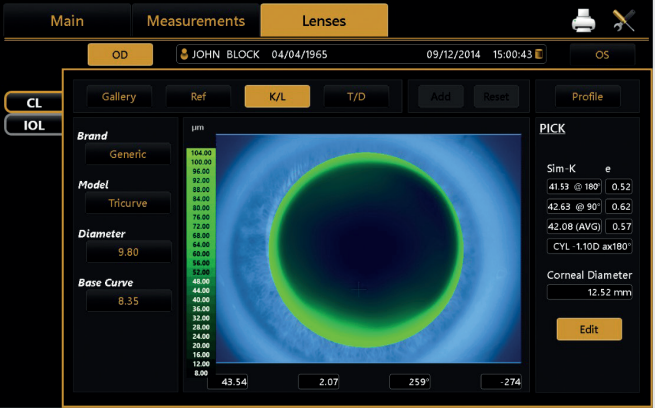
Dynamic Pupillometry

Facilitates quick assessment of the size and light reflexes of the pupil under a range of light conditions. Automatic measurement of pupil diameter and position allows comparison with the size and location of the optical zone of a contact lens, IOL or laser treatment.



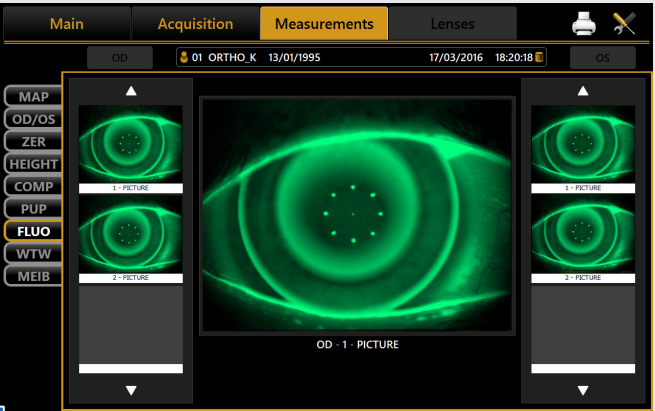
Contact Lens Fitting

Reduce the number of trial lenses needed with onboard simulation software that automatically selects the best fitting lens based on a database of conventional and Ortho-K lenses (upgradeable and customizable by the user). Topographical data may also be exported to third party calculators to streamline lens selection.



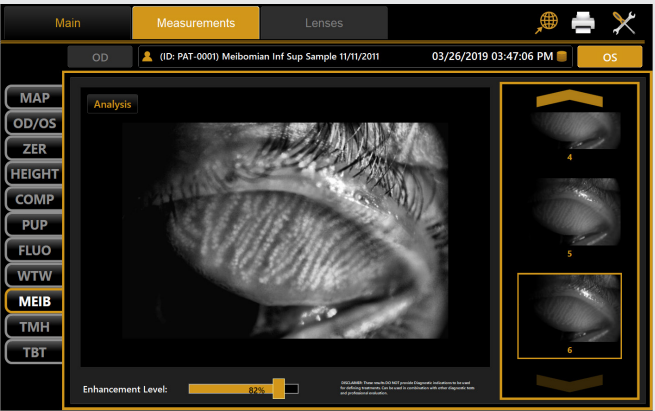
Fluorometry

Assess contact lens fit and dry eye with CA-800's fluorescein imaging. Real-time fluorescein movies enable evaluation of lens movement, distribution of tear film beneath the lens and wetting of the lens surface. Ocular surface staining can also be captured as an image or movie to support examination of the tear film and corneal artifacts.



Meibomian Gland Analysis

Image and analyze the Meibomian glands of the upper and lower eyelids to support diagnosis and management of Meibomian gland dysfunction and encourage compliance with dry eye treatment.





# FEATURES

## Blink Analysis

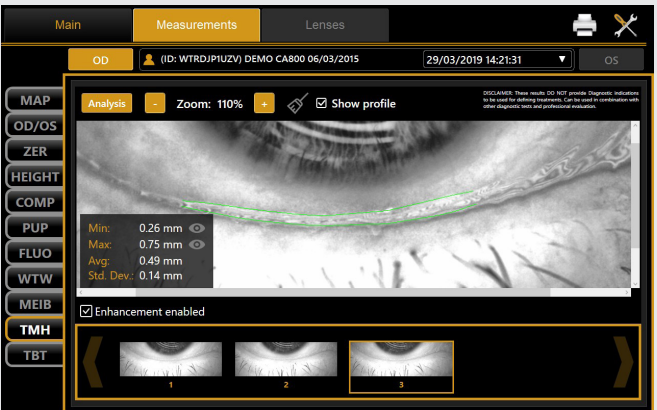
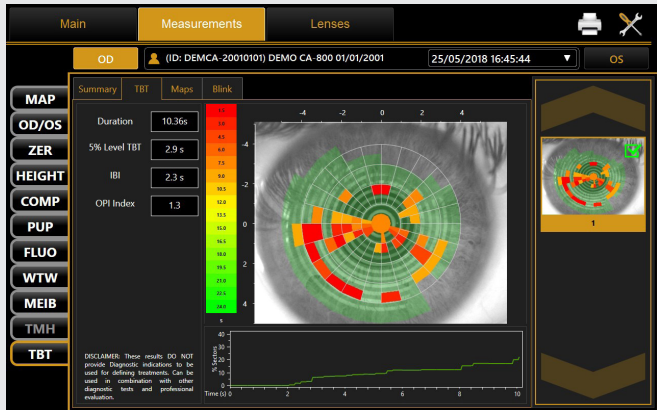
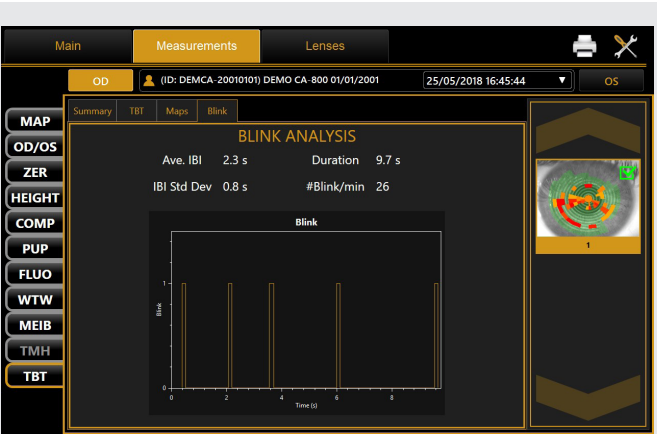
Record normal blinking over a period of time to automatically calculate the average blinks per minute and inter-blink interval. Combining this data with the non-invasive tear break up measurement allows calculation of the Ocular Protection Index (OPI) to identify eyes at risk of ocular surface damage.

## Non-Invasive Breakup Time

Document the time required for 5% of the corneal surface sectors to demonstrate tear breakup while the patient holds their blink. Repeat measurements can be averaged to identify areas of recurrent first break. A video playback feature provides visualization of tear breakup over time along with associated changes in topography and anterior surface aberrations.

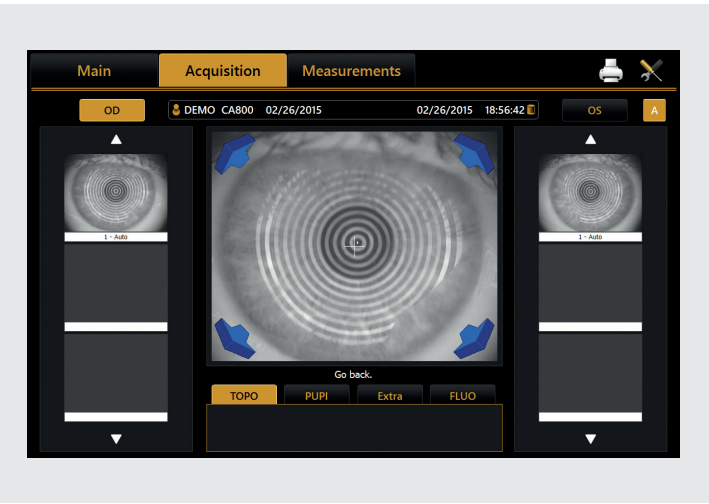
## Tear Meniscus Height

Visualize detailed images of the inferior tear meniscus and use the touchscreen to add a marker based on automatic detection of the lid margin and the top of the tear meniscus. Fine tune the position, separation and angle of each marker if necessary. The tear meniscus profile is then displayed along with minimum, maximum, average and variation metrics.



## Simple Scan Acquisition

Visual signals support fast and easy alignment and accurate focusing. The CA-800 has right and left eye detection, preventing incorrect filing of data to the wrong eye. The automated best image selection mode selects the best focused position and automatically acquires the image.



## DICOM™ Compliance

The DICOM panel in the CA-800 connectivity settings allows the user to set the required parameters for the connections to the available DICOM features:

- Modality Worklist
- Patient Root Query
- Storage
- Storage Commitment

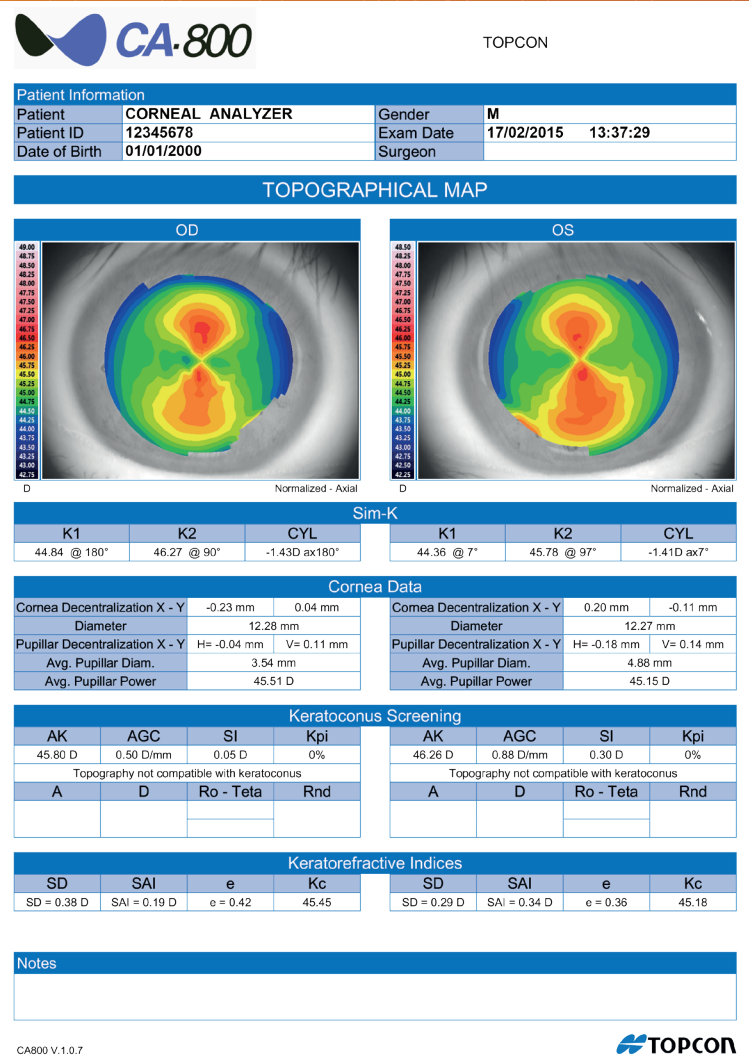
## i-Map Pro Review Software

i-Map Pro optimizes clinical workflow by allowing data review and manipulation from a separate review station to free up the CA-800 device for new scan acquisition.

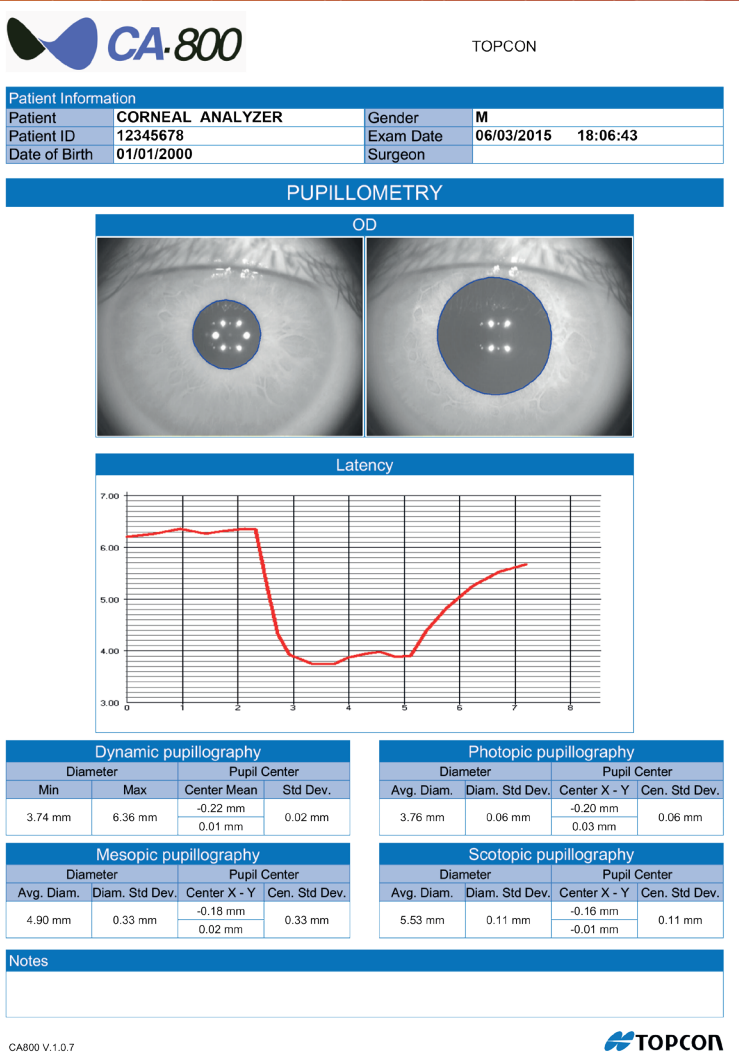




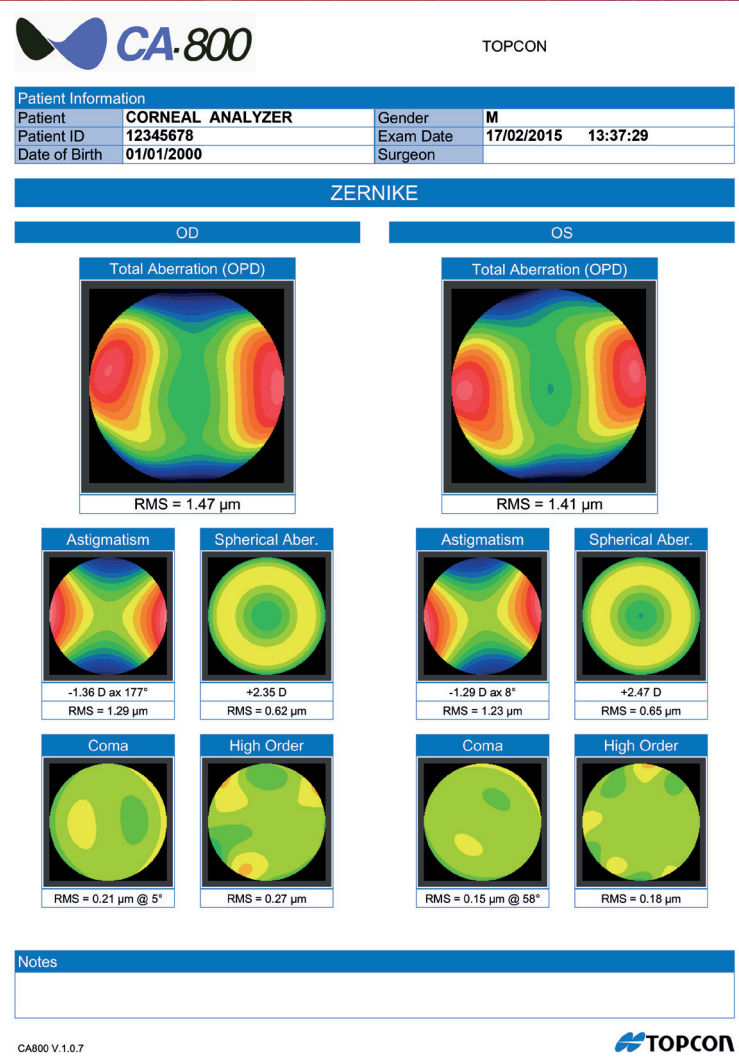
CA-800 REPORT SAMPLES



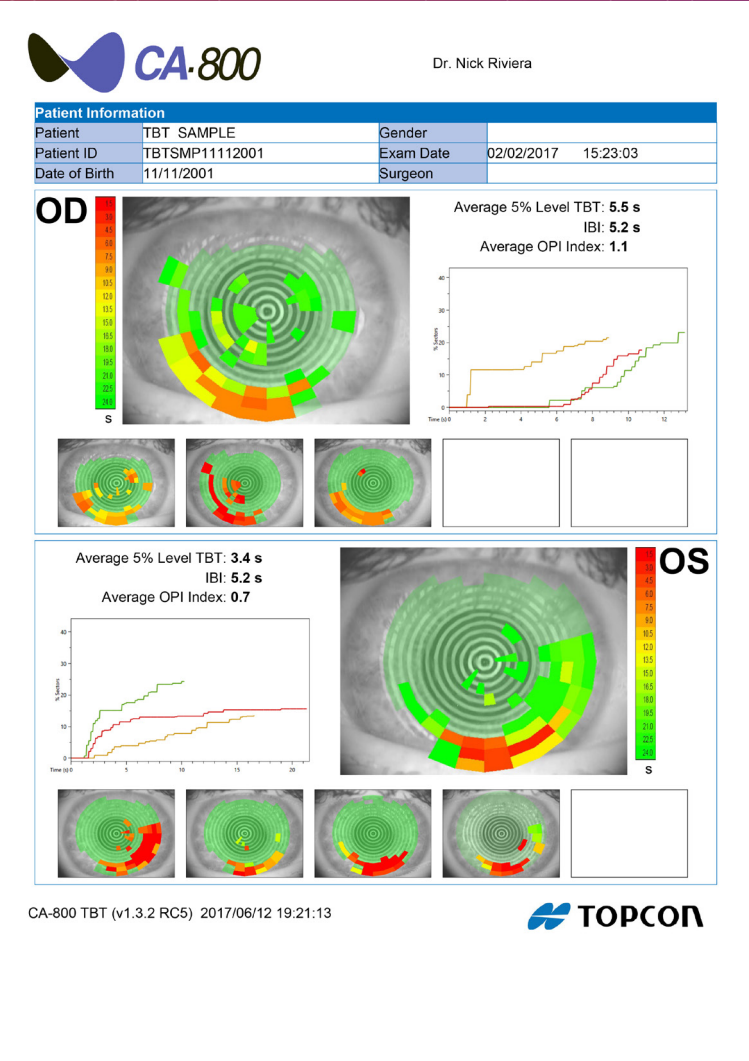
Topography Map



Pupillometry



Zernike



TBUT



# SPECIFICATION

Keratoscope cone	24 rings equally distributed on a 43D sphere
Analyzed points	Over 100.000
Measured points	6.200
Corneal coverage	Up to 9.8mm on a sphere of radius 8.00mm (42.2 diopters with n=1.3375)
Diopter power range	From 1D to 120D
Resolution	+/- 0.01D, 1 micron
Accuracy / Precision axial radius	+/- 0.03mm altimetric data, +/- 2µm at 4mm
Capture system	Guided focus with auto-capture
Output ports	2xUSB, LAN
Monitor	LCD 10.1 inch capacitive touch screen
Database	Internal
Pupillometry	Dynamic, Photopic, Mesopic, Scotopic
Fluorescein	Image, Video
Report	Corneal map, Comparison map, Contact lens, Height map, Zernike analysis, Pupillometry, Toric IOL, Screenshot, NIBUT, Meibomian gland analysis, TMH, Fluorescein
Working environment	10°-40°C, Relative humidity 30-75% (no dewing), Atmospheric pressure 700-1060hPa
Power source	AC 100-240V 50/60 Hz
Power consumption	80 VA
Dimensions	320mm (W) x 490mm (H) x 470mm (L), 15 Kg
Connections	Wi-Fi Optional, LAN integrated / iMAP
Printing options	USB printer, Network printer, PDF on network shared folder, PDF on USB
Operating System	Windows 10 Enterprise LTSC (Long Term Support Channel)
RAM	4GB

Hard Disk	At least 500GB SATA Hard drive (database storage) 32 GB Solid State Drive (operating system and application software)
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## Corneal Analyzer





**IMPORTANT** In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.  
Not available for sale in all countries. Please check with your local distributor for availability in your country.

CE 0123

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SEEING EYE HEALTH DIFFERENTLY