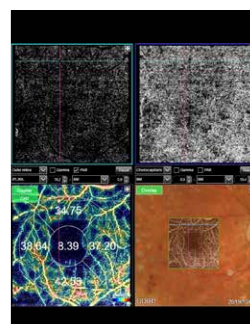
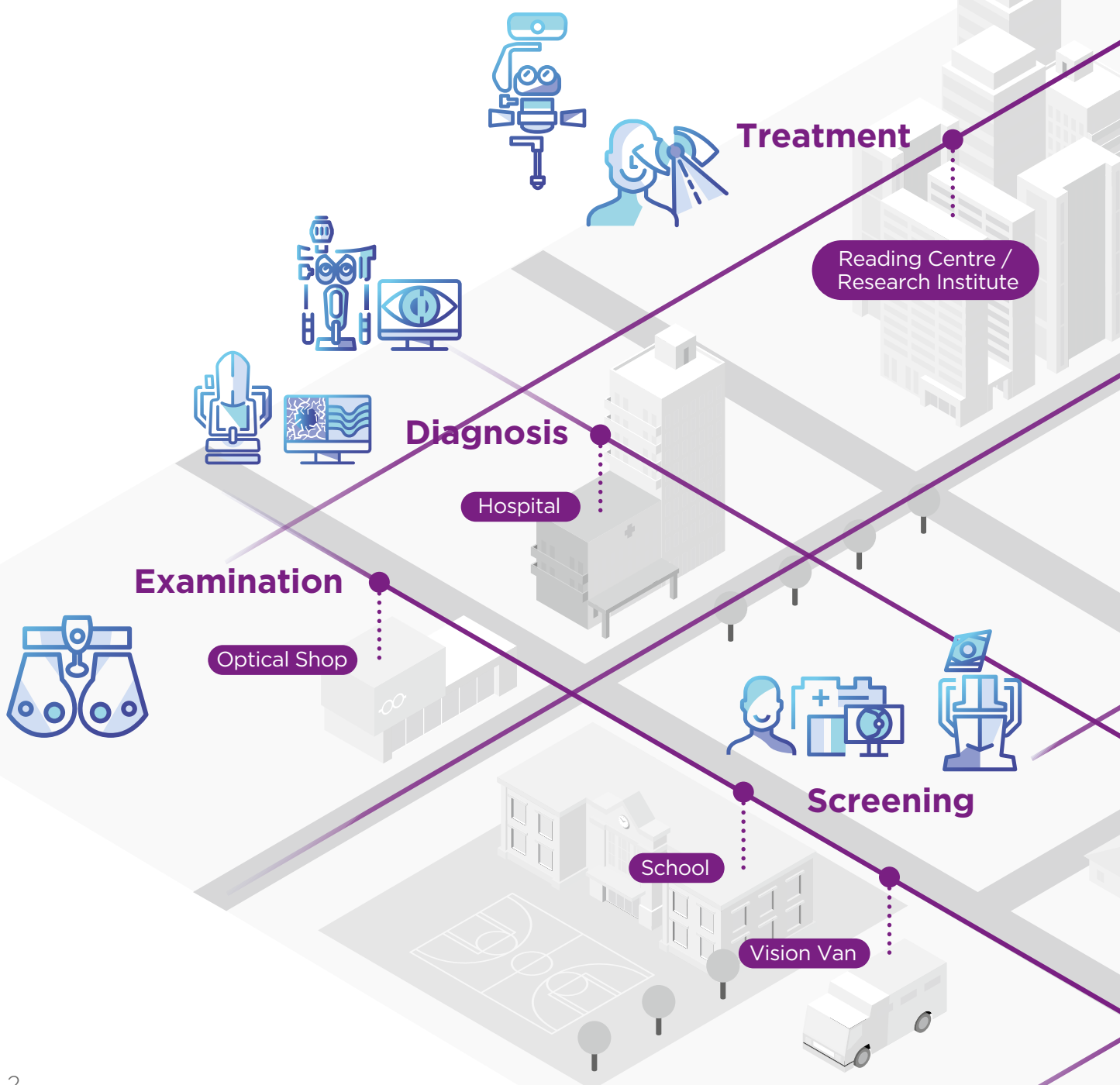
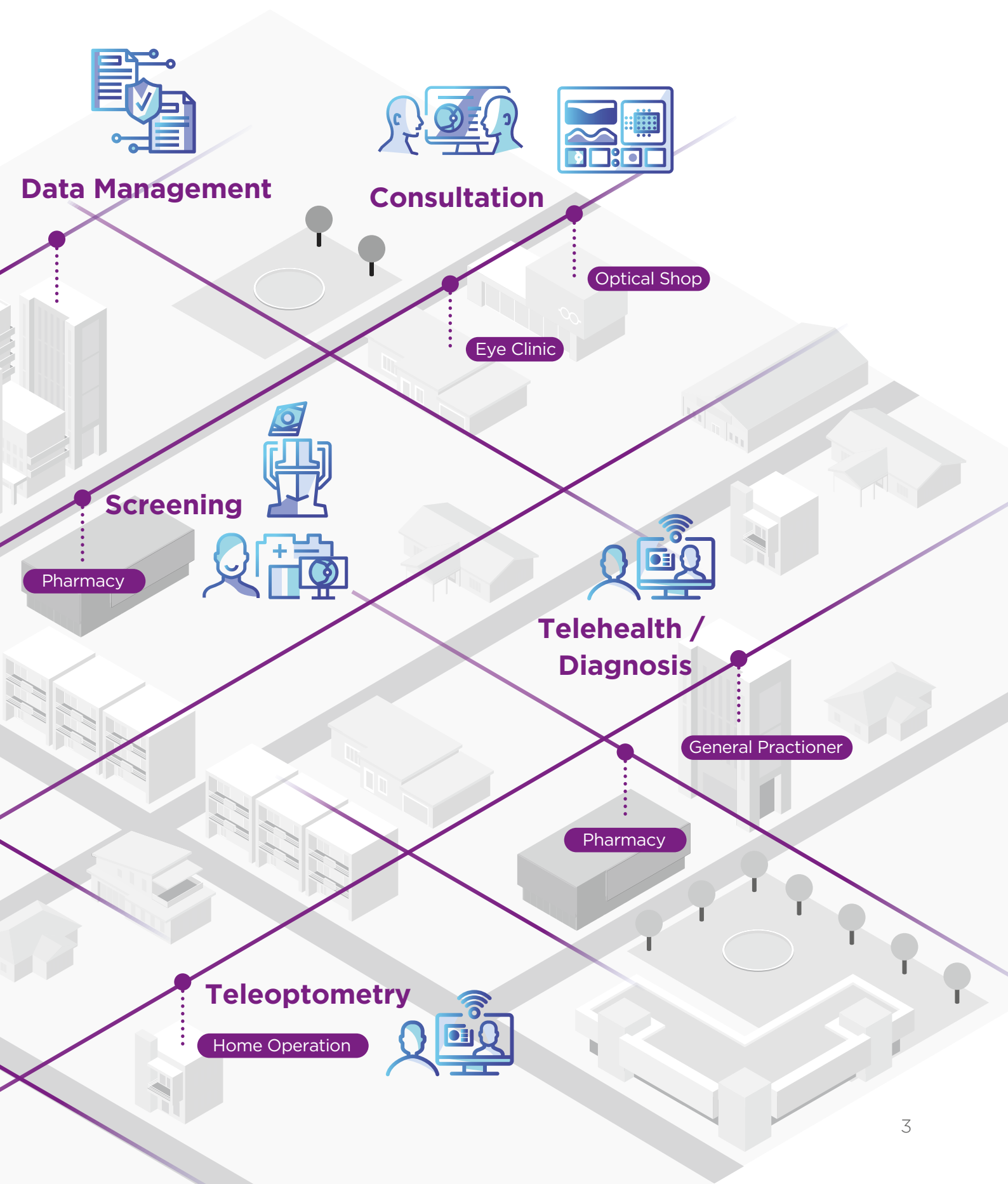


Seeing Eye Health Differently



Topcon Healthcare's new focus into preventive medicine and telemedicine, is enhancing the comprehensive solution of unique feature devices and advanced software. We are aiming to provide the different eye care services to improve the customers' and the partners' business.





Topcon invests in technologies and solutions to make our customers successful every day.



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EC	REP
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 does not apply to products **not** manufactured by Topcon.

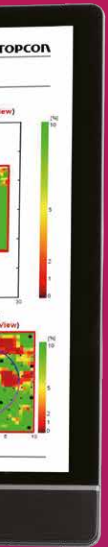
With Maestro2 and IMAGEnet 6 for OCT^{*1}, you have fast, multimodal OCT, fundus imaging and OCT Angiography (OCTA)^{*2}.

Image more with just one touch of a button.



^{*1} IMAGEnet 6 for OCT is the standard component software for Maestro2.
^{*2} OCTA optional extra in some countries. Please check with the distributor in your country.

Optical Coherencce Tomography



3D OCT-1 Maestro2



- OCT and true color* fundus photography
- 50,000 A-Scans per second
- Fully automated image capture
- Compact and space saving design
- 3D wide scan with Hood Report for Glaucoma
- Reference database comparison for full retinal thickness (Retina), ganglion cell + inner plexiform layer thickness (GCL+), ganglion cell complex thickness (GCL++), circumpapillary retinal nerve fibre layer thickness (RNFL)
- Automatic 3D layer segmentation
- Anterior segment OCT
- Panoramic fundus imaging
- 3D volume view

Introducing automated OCT, true color* fundus photography and automated OCT Angiography in one compact instrument. With the touch of a button, OCTA provides you instantaneous vascular structure information - from our world-renowned, multimodal OCT solution.

User-friendly

A user-friendly OCT. The Maestro2 uses robotic technology and improves practice efficiency whilst providing optimal patient care.

Fully Automated Capture

With a single touch, the Maestro2 automatically performs alignment, focus, optimization and capture. After image capture, the report can be immediately displayed by clicking on the icon.

Manual/Semi-Automatic Capture

In addition to automated capture, the Maestro2 offers manual/semi-auto options for difficult-to-image patients.

Maestro2 offers RTC
(Remote Tablet Control)
for social distance
protocol.*³



The breath shield is not part of the Maestro2 product configuration. Please ask your distributor for availability.

*True, full color fundus image simultaneously captured with white light, 24-bit color.

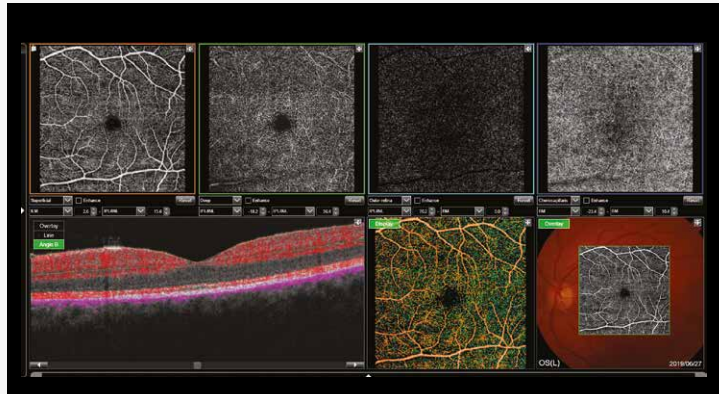
³ Applicable distance is subject to the device's communication performance and the communication environment.

Maestro2 – Now Featuring OCT Angiography

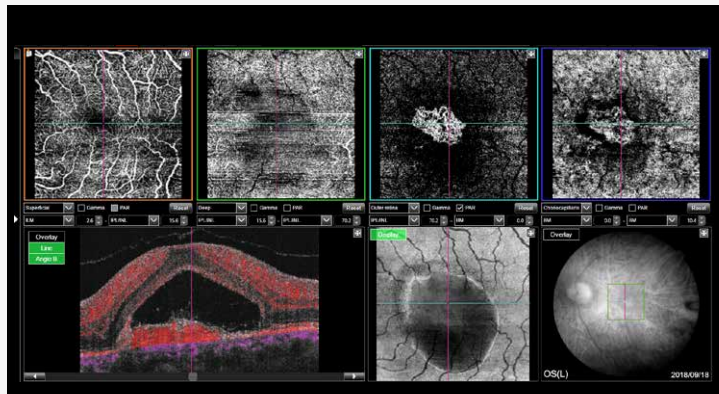
Introducing fully automated
OCT Angiography*¹

At the touch of a button, Maestro2 provides instantaneous vascular flow information without the need for contrast dye injection, together with comprehensive segmentation to enable advanced diagnosis. OCT Angiography includes OCTA Density.*²

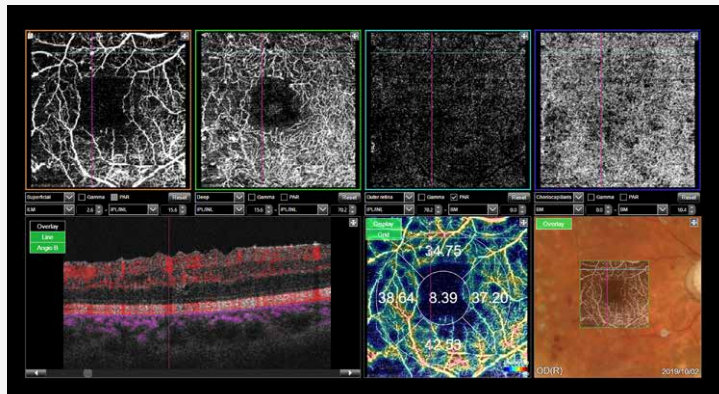
Healthy Eye ^{*3}



Choroidal Neovascularization (CNV)^{*4}



Diabetic Retinopathy (DR) PinPoint™
Registration of microaneurysms^{*5}



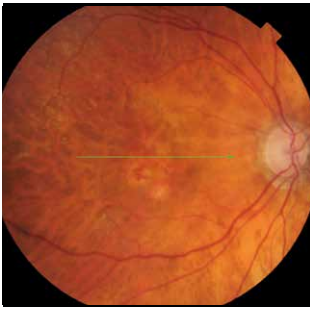
*¹ OCTA optional extra in some countries. Please check with the distributor in your country.

*² The OCTA Density is defined as the ratio between the high signal area and low signal area and it is displayed in color and/or number.

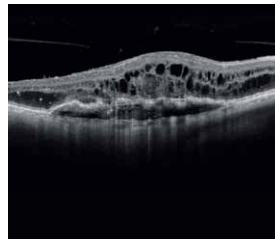
*³ Michael H. Chen, OD

*⁴ Prof. Siamak Ansari Shahrezaei, MD PhD (Karl Landsteiner Institute for Retinal Research and Imaging)

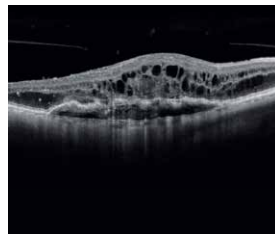
*⁵ Miho Nozaki, MD, PhD (Nagoya City University Hospital)



Tracking is used to capture exactly the same area at each visit and is available for single line, radial or 5 line cross scans.



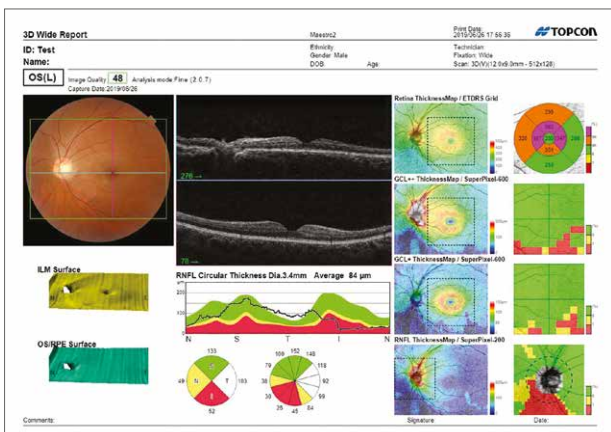
Baseline visit



Follow-up visit

Follow-Up Scans

For smaller, more localized areas, tracking based on the reference image allows follow-up scans to be performed.

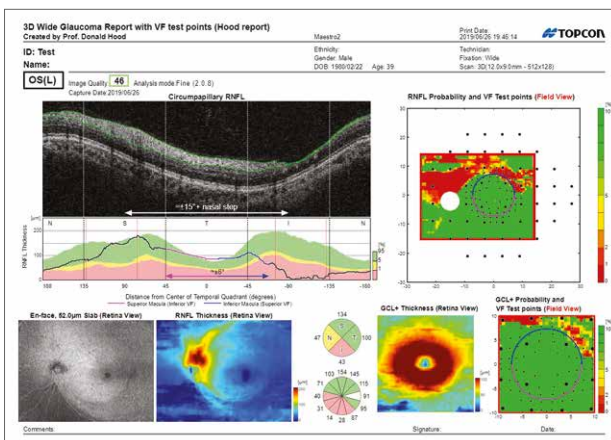


Widefield OCT Scan

The Maestro2 can capture a 12mmx9mm widefield OCT scan, encompassing both the macula and optic disc. Ideal for an annual eye exam, the scan reduces patient testing time. It provides thickness and reference data for the retina, RNFL and ganglion cell layers together with a Glaucoma report which includes disc topography.

GCL+: The thickness of GCL and IPL

GCL+/: The thickness of GCL, IPL and RNFL



Hood Report for Glaucoma with Probability Maps with 3D Wide 12x9mm Scan

Retinal Thickness/RNFL/GCL and probability maps, all in one report. The New Hood Glaucoma Report is now available. This innovative report streamlines the decision-making process through the correlation of structure (GCL/RNFL) with function (overlay of visual field test locations).*

*Donald C. Hood PhD, Translational Vision Science & Technology No.6 Vol.3 2014: Evaluation of a One-Page Report to Aid in Detecting Glaucomatous Damage.

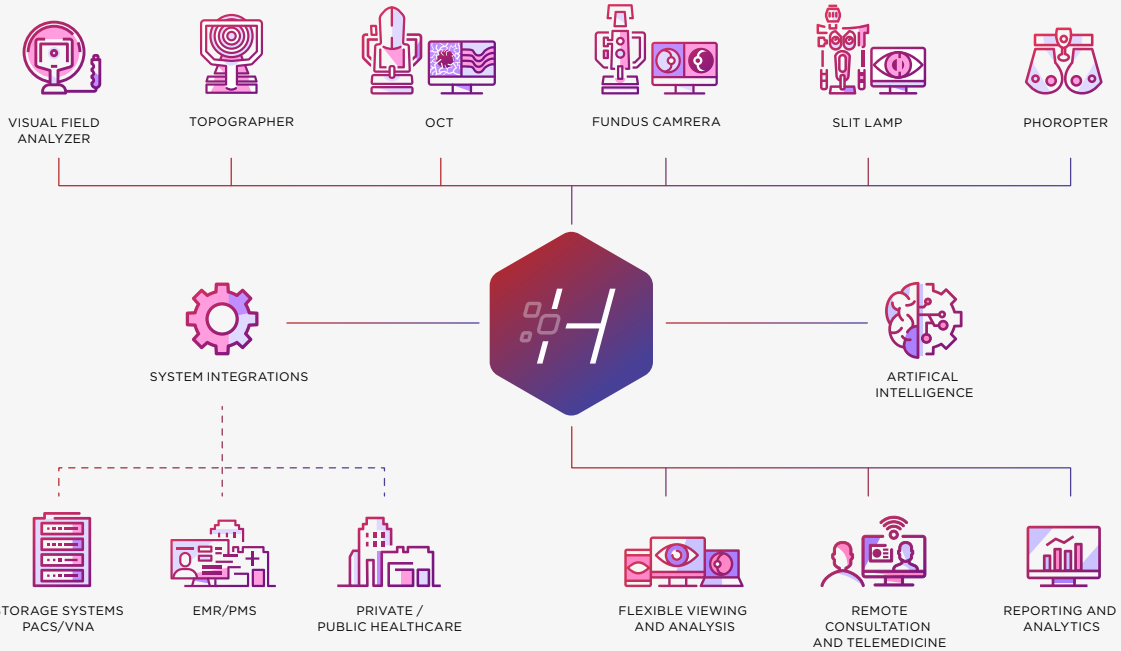
Image and Data Management solutions

Harmony

Harmony is a web-based software solution that connects all examination instruments, eye care professionals, and latest technologies to ensure the best possible patient care and customer experience.

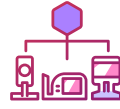


TURNKEY SOLUTION. PEACE OF MIND.



- Eye care professionals to seamlessly access all examination data regardless of the type and brand of the examination instrument, thus allowing fast decisions in patient cases.
- Eye care specialists to work together and securely communicate on patient data, enabling better informed decisions, better and faster care for patients.
- The integration of Artificial Intelligence (AI) algorithms, which assists eye care specialists in earlier detection and diagnosis of eye diseases.
- Helps to increase the efficiency of a busy practice by integrating devices and software into one seamless user experience.
- Enables modern workflows and automated processes to allow high quality of clinical care paths and standardized procedures.

Features at a glance



Connects with any device, regardless of device type and brand – DICOM or not.



Browser-based applications, that allow fast access to all patient exam data from any computer, at any time.



Worklist manager, which eliminates time spent entering patient information at the instrument.



Secure medical grade storage system where all data is encrypted and backed-up.



Data analytics and reporting tools to support your clinical and business operations analytics.



Easy to use. Quickly scroll through your OCT, Fundus and other images.

Additional Features at a glance



Secure telehealth portal for internal and external referrals and second opinions, accessible by accredited specialists from anywhere at any time.



Artificial Intelligence (AI) integrations, that may help early detection and accurate diagnosis in a fast and secure manner.

IMAGEnet® 6

IMAGEnet software is for acquiring, displaying, enhancing, analyzing and saving images obtained with a variety of Topcon photographic devices, such as OCT, mydriatic and non-mydriatic retinal cameras and photo slit lamps.

Topcon refraction instruments such as phoropters, refractometers and lens meters can also be connected. Pre-sets, will improve the refractive workflow.

IMAGEnet has numerous image management functions that facilitates image acquisition, enhancement, measurement and comparison.



Retinal cameras

TRC-NW8 SERIES | TRC-NW400 | SIGNAL | TRC-50DX

TRC-NW8 Series

- Compact, automated versatile camera
- Wide 85° angle of coverage with internal fixation
- 30° & 45° angle available
- Autoshoot, autofocus and auto-exposure: time saving and user-friendly
- Small pupil capability down to 3.3 mm
- Panoramic overview with optional mosaic module
- Stereo photography: easier diagnosis
- IMAGENet connection

The TRC-NW8 series is an impressive line-up of retinal imaging for all vision care professionals. The TRC-NW8 series can capture non-mydratic color images, red-free images, Fluorescein Angiography (FA) and also Fundus Auto Fluorescence (FAF).

Ease of use

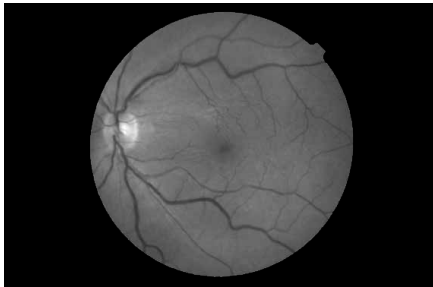
The autoshoot, autofocus and auto-exposure ensure sharp, clear images with a lot of details. In one movement the practitioner can switch between color, red-free and fluorescein images.



TRC-NW8F



TRC-NW8



Patient comfort

The low flash intensity offers the patient increased comfort, which enables the practitioner to take more images in less time. A minimum pupil size of 3.3 mm is needed.

TRC-NW8

The TRC-NW8 comes with a Nikon digital camera, enabling the user to zoom in on the finest detail. The Topcon TRC-NW8 offers a 45° angle which covers fovea and macula. Nine fixation targets enable to shoot nine images which can be collated into a mosaic, or panoramic overview. Auto Mosaic is an option (IMAGEnet Auto Mosaic is needed for this function). Stereo photography and a real red-free filter is a standard option on TRC-NW8.

TRC-NW8F

The TRC-NW8F non-mydratic fundus camera has the same functionality as the TRC-NW8 but adds the possibility to do also Fluorescein Angiography with the same Nikon digital camera.

TRC-NW400

- True color fundus images
- Easy to navigate: fully automated operation
- Space saving design: small footprint & rotatable 10 inch touchscreen
- Versatile & simple operation



The TRC-NW400 non-mydratic fundus camera produces true color fundus images in a revolutionary easy way, with a single touch of a fingertip.

Space saving design

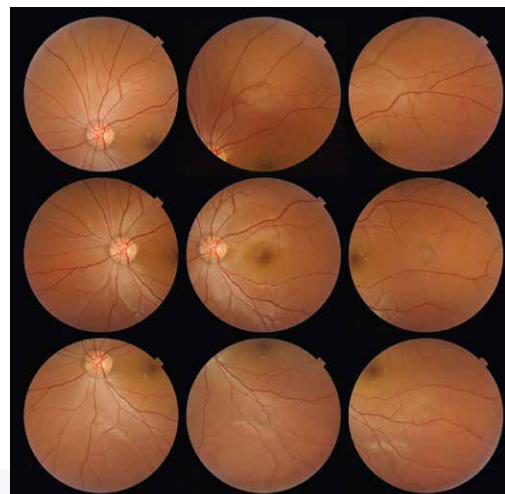
The Topcon TRC-NW400 has a very small footprint which minimizes the use of valuable space in a practice. A tiltable touchscreen enables the eye care practitioner to use the fundus camera from several sides. Due to the flexible set up there is more interaction with the patient and it saves valuable space. Furthermore the TRC-NW400 can comfortably be operated when located against a wall or in a corner.

User friendliness

With just one fingertouch the operator can take images of both eyes. The fully automated TRC-NW400 assures fully automated alignment, autofocus and autoshoot.

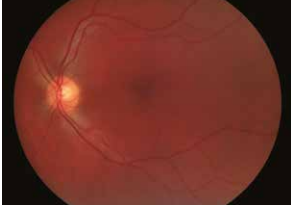
True color images

The Topcon TRC-NW400 produces true color fundus photos of excellent quality. Details are very clear and sharp. The TRC-NW400 has the traditional three fixation for nasal, central and temporal images. Besides that, you can photograph the complete periphery due to nine fixation targets for peripheral imaging. With the Topcon TRC-NW400 you perform a quick screening or do a more elaborate examination. You can acquire fundus images for small pupils as small as 3.3 mm. This means you can photograph nearly all customers. Due to the high sensitivity and low flash intensity you can produce excellent images with low flash and reduce patient's stress.



9 points fixation for central & peripheral images

Imaging Modalities



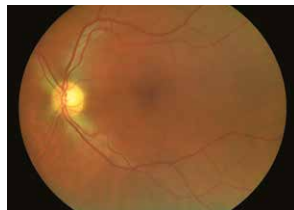
True Color Fundus
True color fundus images are the gold standard in fundus photography, examining the fundus in full color.



Red-Free
Red-Free images provide an enhanced visual contrast of anatomical details of the fundus.



Infra-Red
The invisibility of IR light makes it more acceptable for imaging children and light-sensitive patients. As the penetration of IR light is better, it acts as a useful imaging tool in patients with media opacities like dense cataract. IR can help to visualize external layers (choroid vessels) as well.



Low-Red
Low-Red is a different color rendering of the standard color image and can be useful in some cases if the eye care specialist is used to working with other cameras with more green or orange color rendering.



The Signal hand-held retinal camera, is a versatile addition to the Topcon Imaging line. The Signal is a mobile imaging solution for use in different exam rooms or home settings. The Signal hand-held retinal camera offers true color fundus images for detailed retinal examination.

Imaging

The Signal enables non-mydratric retinal examination with a 50° x 40° field of view, covering the macula and the disc. It is not necessary to dilate pupils. True color images and videos offer excellent screening and documentation of the retina. The nine fixation targets offer both central and peripheral imaging.

Portability

The Signal is ultra-lightweight, compact and comes in a smart carry case. The eye care specialist can visit bedridden patients in nursing homes, or at their own home. The Signal has an operating time of approximately 2.5 hours of continuous use. Images can be uploaded if WiFi is available or can be stored on the Signal embedded memory.

Ease of Use

The auto-focus function of the Signal ensures easy and fast image acquisition. In combination with the Topcon Slit Lamp adapter, positioning and alignment becomes even more effortless. Intuitive icons give access to easy to use menu options in the camera.

Flexible and Mobile Acquisition

Some patients are difficult to capture with a stationary retinal camera. The maneuverability of the Signal makes it easier to take images of an un-cooperative patient. The invisible IR light source does not distract the patient due to the low brightness and intensity and is more acceptable to children and light-sensitive patients. Elderly patients can be screened easily in a reclined or lying down position.

Slit Lamp Mount

A Slit Lamp is a standard instrument in most clinics. The Signal can be quickly and easily mounted to a Slit Lamp, adding fundus imaging to the patient workflow.

- Color, red-free, fluorescein standard
- ICG, auto fluorescence optional
- 20, 35, 50 degree angles of coverage for daily specialist practice & research centres
- Easy to use touchscreen control panel
- Easy focusing system with split focus bars
- Compatible with a wide range of digital cameras
- Pan and tilt
- IMAGENet connection

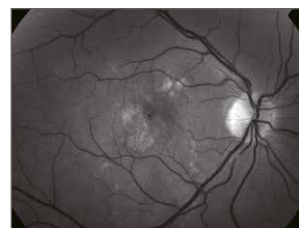
The TRC-50DX Series is the gold standard in retinal imaging. It has more digital-ready capability than any other fundus camera on the market and represents the most sophisticated and complete retinal capturing device available today. It is a versatile fundus camera for color fundus images, red-free images and FA images. The TRC-50DX can be upgraded with ICG and auto fluorescein as well.

Spaide autofluorescence filters

The Spaide AF filters are optimized auto fluorescence filters designed to work exclusively with Topcon's IMAGENet systems. Developed by Dr. Richard F. Spaide, MD of Vitreous Retina Macula Consultants of NY, matched interference filters have been optimized to allow for better visualization of fundus auto fluorescence. By perfecting the excitation and barrier filters through improved science and state-of-the-art manufacturing processes, the filters are approximately 20 times more efficient than current generation FAF filters and require 40% less exposure.

Ease of use

The touch panel allows the operator to switch easily between procedures. The TRC-50DX automatically selects the correct filters. Flash settings can be done with the touch panel as well, which is very convenient for the operator. The so called Split Image Focusing enables the photographer to take clear sharp images with minimum efforts. The TRC-50DX has a swing and tilting function which allows viewing of the peripheral segments without moving the patients head.



Tonometers

CT-1P

- Fully automated operation with touchscreen
- Reliable & fast measurements
- Flexible & space saving layout
- Soft air puff
- Adjusted IOP calculation

The CT-1P non-contact tonometer takes automated operation to another level. Simply touch the centre of the pupil on the touchscreen control panel and the CT-1P automatically measures the intraocular pressure (IOP) and the pachymetry for both eyes.

All operating procedures can be performed with the rotatable touchscreen, the sophisticated buttons provide an intuitive experience. The soft air puff used for measurement leads to less stress for the eye and more comfort for the patient. The CT-1P calculates the adjusted IOP based on measured pachymetry to obtain reliable IOP measurements according to the actual thickness of the cornea.

The adjustable control panel allows the operator to position him- or herself anywhere around the patient since the modern touchscreen panel can be positioned in several directions. This makes the CT-1P a flexible and space saving instrument.



- 3D Auto alignment function allows quicker & easier measurement
- Smooth operation
- 8.5 inch wide touchscreen control panel
- Soft air puff
- Higher measurement success rate for eyes with IOL, in the IOL measurement mode
- Compensated IOP values with central corneal thickness values
- Compact designed body
- Easy set-up with a LAN network

Topcon has significant experience in designing and producing high quality tonometers and kerato refractometers. For a greater customer experience, Topcon has developed the CT-800A, a non-contact tonometer with 3D auto alignment function. CT-800A offers enhanced efficiency and easier operation to improve the day to day examination and the work flow in a practice.

Adjusted tono value*

The CT-800A is able to calculate adjusted tono value from a measured IOP to manually by putting corneal thickness value measured by other devices, such as a pachymeter.

Soft air puff

Software controls the optimal amount of air required for every measurement on each individual eye. A soft air puff means less stress on the eye, resulting in an improved patient experience.



*Adjusted tono value is reference value

- Soft air puff
- Maintenance free air-intake system
- Calculation of adjusted IOP based on pachymetry values
- 8.5 inch LCD touchscreen panel
- LAN connectable
- Easy to use

The CT-800, non-contact computerized tonometer makes intraocular pressure (IOP) measurement easier than ever before. The bright 8.5 inch touchscreen ensures control of all functions just by a touch of a fingertip.

The smooth base movement due to a 23% reduction in weight from the previous models and an improved joystick operation makes the CT-800 easy to use. The soft air puff ensures accurate measurement results which can be printed through the drop-in printer at the front or exported through a LAN connection. The air intake system results in less maintenance and guarantees accuracy. The CT-800 is able to calculate adjusted intraocular pressure based on the manual input of pachymetry values. The compact footprint and design of the CT-800 saves space and adds functionality to the contemporary eye care practice.



Corneal Topographers

CA-800

- Topography
- Fluorometry
- Pupillometry
- Zernike analysis
- Contact lens fitting simulation
- Toric IOL calculation
- Database onboard
- Meibography
- White to white
- i-Map external viewing software

Curvature mapping

The CA-800 corneal analyzer is a comprehensive solution for evaluation of the anterior corneal surface. In addition to curvature mapping which can also be displayed in 3D, the instrument provides a complete analysis of the cornea including the keratoconus probability index and height map of the corneal surface. The CA-800 also provides fluorescein imaging and real time fluorescein videos for contact lens fitting.

Pupillometry, fluorescein & meibography

The CA-800 is a placido-based topographer with 24 rings that measures up to 6,144 data points, with axial and instantaneous curvature evaluation. Moreover, it is equipped with four infra-red LEDs and two white LEDs for dynamic and static pupillometry and eight blue LEDs for fluorescein images and videos to carry out full contact lens analysis. With the four infra-red LED's meibomian glands can easily be analyzed for any possible defects.

Contact lens fitting

The CA-800 is the perfect support for contact lens fitting. A simulation software is provided onboard including a complete contact lens database for all the main manufacturers (upgradable and customizable by the user). The onboard fluorescein acquisition system allows full control of the contact lens position on the eye. Thanks to the onboard pupillometer the user can check the pupil position and diameter (from photopic to scotopic condition) in relation to the position of the optical zone in Ortho-K or refractive surgery treatments.

Zernike analysis

The CA-800 can be used to perform Zernike analysis to evaluate any aberrations and deficiencies of the cornea. The CA-800 presents the curvature mapping of both the right and left eye at the same time on the display for easy comparison, as well as comparison with previous measured results.



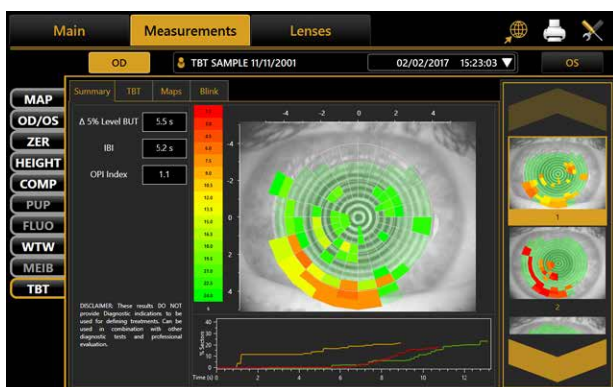
- Comparisons
- Curvature height map
- Automated best image selection
- Capacitive 10.1 touchscreen
- Keratoconus probability index
- Ortho-K treatments
- Refractive surgery treatments
- Complete corneal analysis

CA-800 ease of use

The CA-800 is extremely easy to handle and use. From image acquisition to analysis, the onboard software is intuitive, user friendly and the 10.1 inch capacitive touchscreen provides quick navigation. Visual guidance supports fast and easy alignment and focusing of the instrument; the “best image” selection modus automatically acquires the best focused image.

Integrated PC

The compact design of the CA-800 includes a fully integrated PC. An external PC is not required to manage a patient database for archiving and re-analyzing purposes.



Non-invasive tear film analysis

The CA-800 offers a comprehensive analysis of the Tear Film by using the Blink Detection and Tear Breakup Time measuring modes.

The Blink Detection automatically detects blinks and calculates the average blinks per minute and blinks interval. The Tear Breakup Time (TBT) records the patients tear film condition while they hold their blink and calculates the time of first breakup and average time for breakup of the Tear Film. This new feature allows video playback with a colored overlay to show the quality of the corneal surface and is extremely easy to interpreted using color coded sectors.

i-MAP for CA-800

The optional software i-Map enables delegation of acquisition to support staff while the clinician reviews the data in another room. i-Map allows full manipulation of the data. It contributes to optimizing your clinical workflow.

Build, Manage and Grow Your Myopia & Dry Eye Practice.

Overview of MYAH



Corneal Topography including keratoconus screening and pupillometry



Axial Length measurement by Optical Low Coherence Interferometry



Progression reports for analyzing treatment efficacy



Comprehensive suite of Dry Eye assessment tools



Patient-friendly with rapid capture



Compact, space-saving, easy to operate

50% of the world's population¹ may be myopic by 2050. **European regions are not an exception.**

Region	2000	2010	2020	2030	2040	2050
Central Europe	20.5%	27.1%	34.6%	41.8%	48.9%	54.1%
Eastern Europe	18.0%	25.0%	32.2%	38.9%	45.9%	50.4%
Western Europe	21.9%	28.5%	36.7%	44.5%	51.0%	56.2%
Global	22.9%	28.3%	33.9%	39.9%	45.2%	49.8%



Build your myopia management service. MYAH provides the initial baseline to monitor risk, allowing you to start the conversation early with parents.

Manage: to treat or not to treat?

MYAH provides essential information to assess the risk of myopia and for close monitoring of the effectiveness of any myopia interventions.

Grow your myopia management service: Offering axial length screening tests may complement your refraction tests.

MYAH offers all the technologies required to support myopia management: optical biometry, corneal topography and pupillometry — it is a one-time investment. In addition, MYAH is an all-in-one device that offers an evolving platform which provides the tools to add or grow Dry Eye Management.

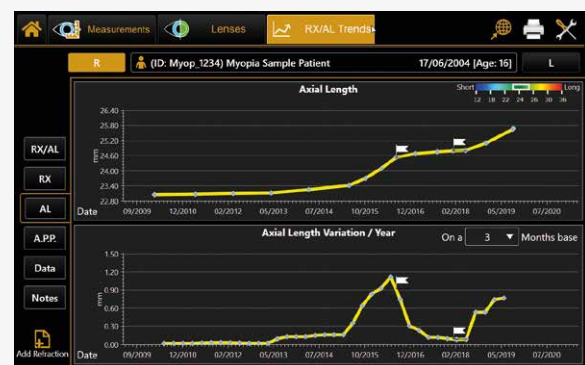
Monitor the progression of myopia and the effectiveness of intervention.

The Rx and Axial Length charts help you track progression and monitor the effectiveness of intervention. MYAH provides this data so that you can compare changes over time. It also uses the same proven technology as the Topcon Aladdin biometer, producing reproducible axial length results².

Progression of Refractive Error And Axial Length Over Time



Progression And Variation Of Axial Length



- Holden, BA, Fricke, TR, Wilson, DA et al. Global prevalence of myopia and high myopia and temporal trends from 2000 through 2050. *Ophthalmology*. 2016; 123:1036–42. Available from: doi: DOI: 10.1016/j.ophtha.2016.01.006
- Mandal, P, Berrow, EJ, Naroo SA, et al. Validity and repeatability of the Aladdin ocular biometer. *BJO*. December 01, 2015. Available from <http://dx.doi.org/10.1136/bjophthalmol-2013-304002>

Additional Features.

Dynamic Pupillometry

Provides clear information on the reaction time and size of the pupil, which may be useful to monitor low dose atropine compliance or to titrate the dose of atropine. The user can examine pupil centration and diameter over a range of light levels, which is useful for Ortho-K and multifocal lens fitting, and is also informative for pre and post-refractive surgery.



Contact Lens Fitting

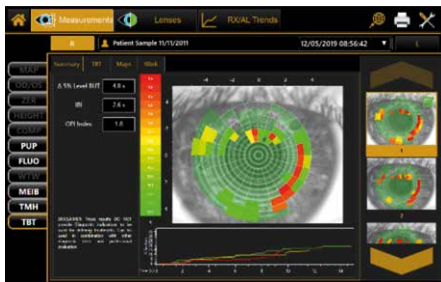
MYAH provides support for contact lens fitting, reducing the number of lenses that need to be trialed on the eye:

- Includes a database of conventional RGP and Ortho-K lenses.
- Export topography data to 3rd party calculators.
- Fluorescein simulation with ability to save and review data.



Dry Eye Assessment Tools

These tools offer non-invasive Tear Break-up Time (NIBUT), Meibomian gland imaging with the area of loss analysis, tear meniscus height analysis, blink analysis, real fluorescein imaging and video acquisition, and video review of anterior corneal aberrations between blinks.



Corneal Topography

MYAH offers another range of tools to analyze the anterior cornea, including topographic maps, 3D maps, comparison maps, height maps, Zernike analysis and keratoconus screening.



Corneal Aberration Summary

The Zernike expansion coefficient is used to determine which component(s) dominate the aberration structure of the cornea and to what degree.

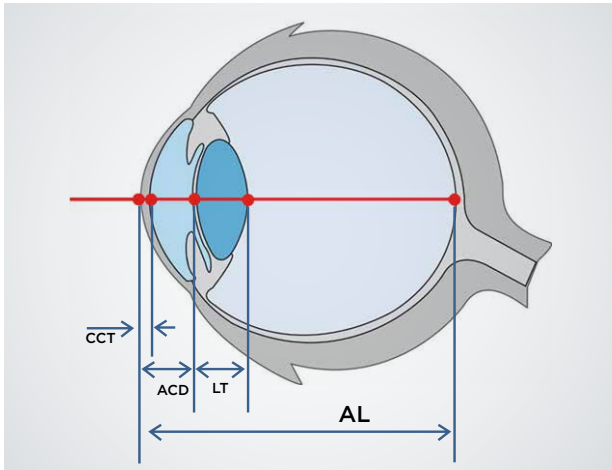
The anterior corneal Zernike summary consists of 36 polynomials up to the 7th order and provides a clear view of the optical irregularities that can impact the quality of vision.



Biometer

ALADDIN

The Aladdin is an easy-to-use, combination optical biometer and full corneal topographer. 9-in-1 features include optical coherence biometry, Placido topography, wavefront analysis of the cornea, IOL calculation suite, pupillometry, DICOM connectivity and the NEW RX/AL Trends Module.



Posterior & Anterior interferometry

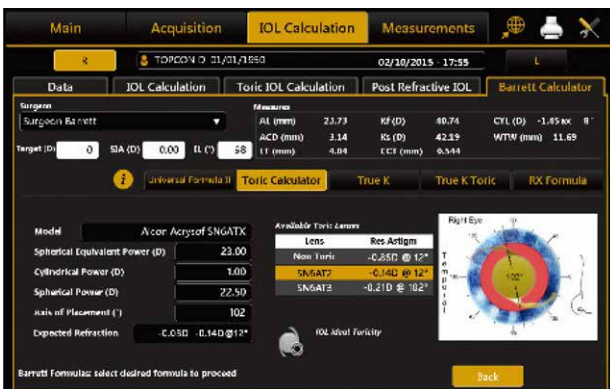
Biometry results are complemented with anterior topography, Zernike analysis and pupillometry in one fast, accurate and easy acquisition. The Interferometer of ALADDIN also provides anterior measurements such as the Central Corneal Thickness (CCT), Anterior Chamber Depth (ACD) and Lens Thickness. You get the complete picture for all cataract surgeries. Whether you are performing standard cataract surgery or premium IOL implantation, you will be screening for corneal aberrations, Keratoconus* and previous corneal refractive surgery procedures all at once. The ALADDIN only requires just one Acquisition.



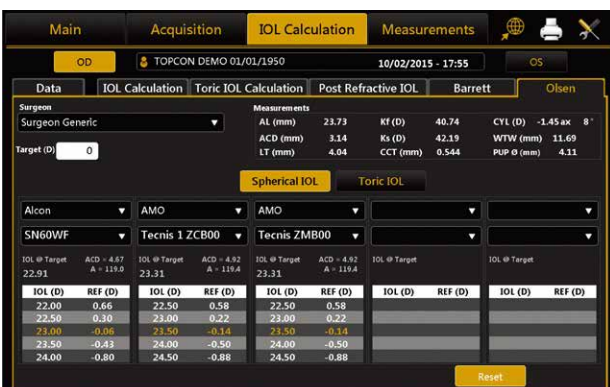
RX/AL Trends Module

- Measures and displays trends in AL changes
- Allows you to monitor change progression
- Charts and tracks refractive variations
- Provides comprehensive printouts

Aladdin HW3.0



The Aladdin's Barrett IOL Calculation Suite includes the Barrett Rx, the Barrett Toric Calculator Formula, the Barrett True K and the Barrett Universal II formulae.



Olsen Formula

Trend Monitoring

By combining manually entered refractive information with biometric data obtained by low-coherence interferometry, the Aladdin provides a quantitative report of the progression of changes in the eye's refractive power. After the refraction values are entered, the Aladdin performs 7 critical measurements and provides a numerical analysis of the trends of the eye parameters related to changes in the axial length, corneal curvature, anterior corneal wave front analysis and other dimensional variations. Changes can be followed in periods of 3, 6 and 12 months providing a trend that can be used to track the progression of certain eye conditions.

Onboard Barrett IOL Calculation Suite

Dr. Graham D. Barrett developed the Barrett formula in 2013 and takes into account the posterior cornea considering the lens position for each individual patient instead of calculating IOL power by estimating lens thickness based on patient's age. The Barrett formula uses the Universal II, which is a method of predicting IOL power to work out where the lens is and utilizes that information to calculate the effect of the cylinder power at the cornea. The Universal II formula was also developed by Dr. Barrett. Dr. Barrett's formula considers the thickness and shape of the lens as well, which provides a more sophisticated way of predicting and translating the cylinder power. The formula is able to predict posterior corneal curvature without actually measuring it.

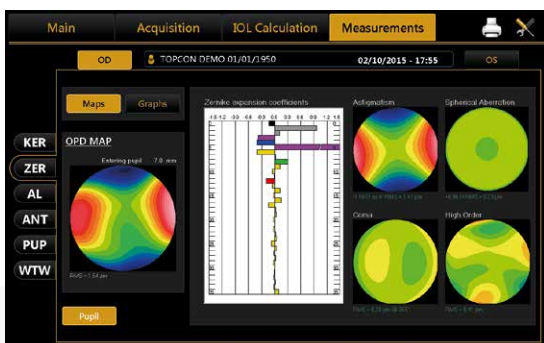
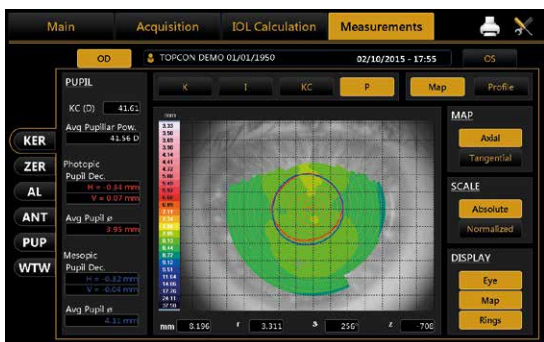
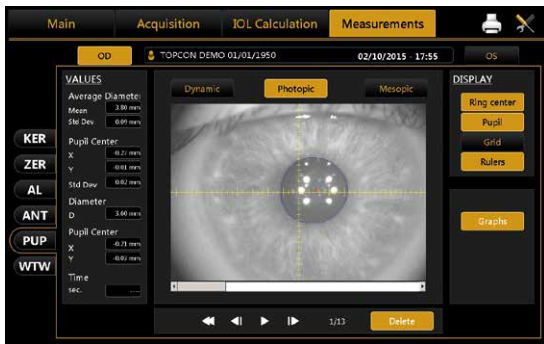
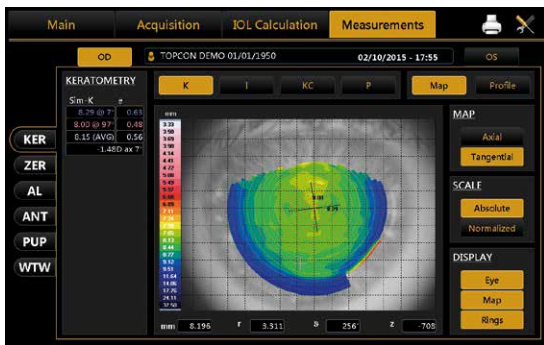
Onboard Olsen Formula

The Aladdin HW3.0 provides precise measurements of the internal structures of the eye including Central Corneal Thickness and Crystalline Lens Thickness. Those measurements used in combination with the on-board Olsen IOL calculation formula provides accurate IOL power calculations in virtually all types of eyes regardless of size. The Olsen formula utilizes a newly developed concept by Dr. Olsen called the C-constant which predicts the Effective Lens Position (ELP) when performing in-the-bag IOL implants. This model also predicts the lens position of anterior chamber IOLs. The C-constant approach performs independently of other conventional measurements such as axial length, keratometry, white-to-white length, IOL power, etc. It will provide accurate IOL calculations in any type of eye.

KERATOCONUS		KERATOCONUS		KERATOCONUS	
AK	43.03 D	AK	46.75 D	AK	55.06 D
AGC	0.90 D/mm	AGC	1.89 D/mm	AGC	5.39 D/mm
SI	-0.50 D	SI	0.58 D	SI	3.82 D
Kpi	0%	Kpi	70%	Kpi	90%
Topography not compatible with keratoconus		Suspect keratoconus		Topography compatible with keratoconus	

Aladdin Features.

- Keratometry / Topography
- Keratoconus screening
- Pupillometry
- Aberrometry analysis (Zernike)
- Axial length
- Anterior biometry
- White to white



Kerato-, refracto- and tonometers

TRK-2P (with optional LU-1)

- 4 in 1: refraction, keratometry, tonometry & pachymetry
- Fully automatic
- Soft air puff
- Optional LU-1

The TRK-2P combines a refractometer, keratometer, non-contact tonometer and pachymeter in one compact instrument. The TRK-2P features a fully auto alignment system with auto measurement function. The compact size and 8.5 inch rotating color touchscreen control panel offers total flexibility for the operator and also instrument location. With just one touch of the fingertip on the control panel the TRK-2P will measure both eyes accurately due to Topcon's exclusive Rotary Prism Technology™.

Cataract mode

The TRK-2P has a built-in function that allows the measurement of patients who have cataract or opacity, this function works automatically or manually.

Soft air puff

Improved nozzle design controls the optimal amount of air required for every IOP measurement. A softer air puff improves patient comfort and results in an improved measurement experience.

Adjusted intraocular pressure (IOP)

The pachymeter function can be used to adjust the measured IOP value depending on the cornea thickness. The integrated formula for IOP adjustment can be customized by the eye care practitioner.

LU-1

The LU-1 control lever accessory adds manual control for measurement when patient compliance requires it.



- Corneal mapping function
- Topcon's Rotary Prism Technology for Unparalleled Accuracy
- Easy operation with 3D auto alignment
- Compact design
- Wide touchscreen control monitor
- Simple and intuitive data display

Topcon offers the unique combination of Kerato-Refractometer and a Corneal mapping system in one device to improve the workflow in your practice. The KR-800PA provides you the most reliable and accurate corneal analysis by making use of the placido ring and its sophisticated measurement principle. It includes Topcon's patented Rotary-Prism technology for quick and precise refraction and keratometry measurements.

Corneal mapping system supports contact lens fitting and diagnosis of corneal irregular astigmatism. It provides information about the shape of the cornea and is displayed quickly and even overlays the mapping output onto the anterior segment by one single touch. Topcon's KR-800PA is an affordable choice for all clinics offering refraction and contact lens fitting. For easy operation and speedy measurement in your practice, the KR-800PA features 3D auto alignment and an Auto-Start function. As soon as the instrument is properly aligned, this innovative function initiates the measurement process and completes multiple readings of each eye.

i-Map for KR

The KR-800PA comes with i-Map for KR external visualization software for detailed corneal analysis. The software is able to analyze corneal data acquired by KR-800PA remotely. With the i-Map for KR, you are able to make a comparison between multiple exams. i-Map for KR is also a perfect platform for efficient RGP contact lens fitting. The contact lens simulation feature automatically selects the best fitting contact lens based upon the integral, comprehensive contact lens database, featuring all main manufacturers. The Zernike analysis module consists of 36 polynomials up to the 7th order, and provides clear view of the optical deficiencies which can disturb vision.



KR-1

- Fully automated operation with rotatable touchscreen
- Flexible & space saving layout
- Reliable & fast measurements
- Compact ergonomic design

The KR-1 is fully operated through a modern rotatable touchscreen. Simply touch the centre of the pupil on the rotatable touchscreen to start measuring both eyes. The device automatically obtains objective refraction data of the right and left eye. The KR-1 automatically detects abnormal conditions of the eye, i.e. cataract. The instrument changes automatically to “cataract mode” and continues the measurement. If required, the KR-1 can be set in manual mode as well. The manual mode can be used for focusing and acquisition. The up/down and left/right movement will remain automated.

Reliable & fast measurement

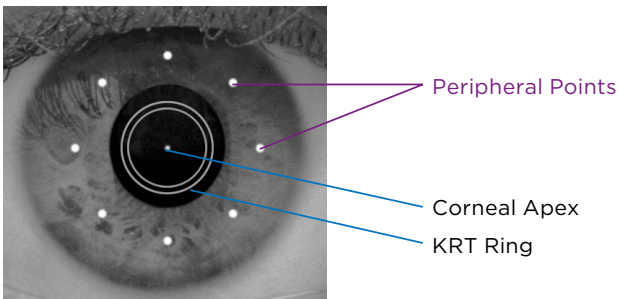
With Topcon's exclusive Rotary Prism Technology™, the KR-1 provides unmatched accuracy and reliability. This technology ensures reproducible results. The objective measurement of both eyes is done in a fast and comfortable way for the patient. This auto kerato- refractometer can even measure patients with a pupil diameter as small as 2.0 mm.





Flexible & space saving layout

The adjustable touchscreen control panel enables the operator to be positioned anywhere around the patient, because the control panel can be faced in a number of different directions. The KR-1 can be positioned in a conventional set-up against a wall or even in a corner of a room. The compact body enables the operator to support the patient easily from many different positions during an eye measurement even when the patient's eye lid needs to be opened. These unique aspects will contribute to space saving and flexible layout in an examination room.



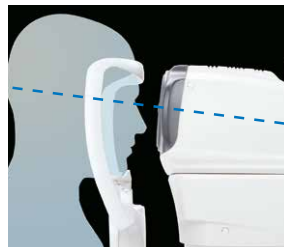
Measuring Screen (Anterior image)

Pheripheral KRT

The KR-1 allows the operator to take peripheral KRT measurements of the corneal curvature radius, in addition to inner KRT ring measurements, which is useful in corneal evaluation of contact lens fitting.



Conventional model



KR-1

Compact ergonomic design

The ergonomic design provides a more comfortable position for the patient with a 5° inclination of the patient's head and optical head of the KR-1. The compact body of KR-1 and improved chin rest design enables easier access to patients. The operator will have better interaction with the patient.

KR-800S

- Objective & subjective measurement
- VA charts from 0.1 to 1.2
- Reading power assessment on various distances
- Comparison of subjective, eyeglass & unaided VA's
- Pre- & post-cataract surgery VA assessment



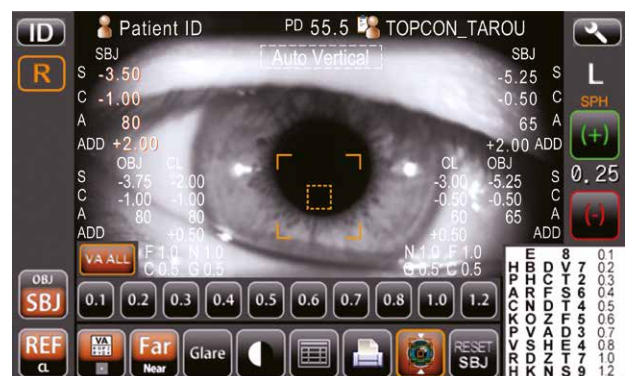
The KR-800S is unique because it features not only objective auto refraction and keratometry, but it also performs subjective far and near testing as well as four function tests. These 6-in-1 functions assure quick and accurate results and enhance your test workflow.

The test results of all objective and subjective measurements are shown on the monitor and can easily be printed through the drop-in printer in front of the instrument. It is very easy to test objective measured results subjectively. The accurate objective results can be spherical edited until the highest visual acuity (VA) is achieved. Additional reading power can be measured on various distances between 33 cm and 60 cm.

If a computerized lens meter is connected, the instrument can also test and show the patient's VA result with their current eyeglasses. Since it is easy to compare VA with the patient's current eyeglasses result or even with unaided situation, new eye glasses can be advised if necessary.

The glare, grid and contrast test availability in combination with VA measurement make the KR-800S a versatile instrument that is an asset not only for opticians but also for ophthalmologists with pre-cataract, post-cataract or refractive surgery.

KR-800S can provide pre- & post-cataract surgery visual acuity information in order to review the cataract surgery outcome. The KR-800S is able to simulate the use of premium IOL's such as Toric IOL or Multifocal IOL's. The patient can experience the influence of premium IOL's on their visual acuity. This makes the KR-800S a perfect instrument in addition to Topcon's biometer ALADDIN.

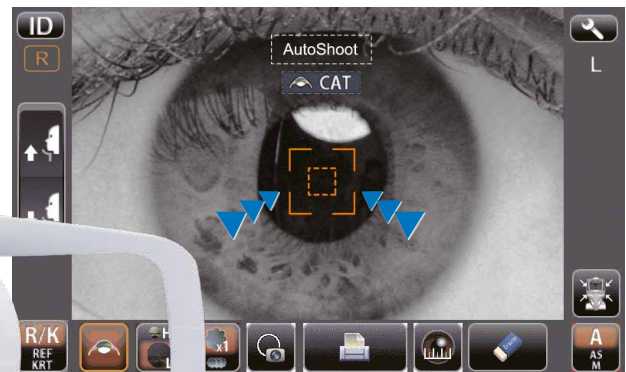


- 3D Auto Alignment function allows quicker & easier measurement
- Smooth operation
- 8.5 inch touchscreen control panel
- Compact designed body
- Easy set-up with a LAN network

Topcon has significant experience in designing and producing high quality kerato refractometers and tonometers. For a greater customer experience, Topcon has developed the semi auto kerato-refractometer KR-800A with 3D auto alignment function. KR-800A offers enhanced efficiency and easier operation to improve day to day examination of the workflow in a practice.

3D auto alignment function maintains proper alignment with the patient

3D auto alignment feature maintains XYZ alignment even during small eye movements, providing consistent and repeatable measurements.* The operator follows the alignment guidance on the monitor for initial alignment, following by the start of automatic alignment and measurement. 3D auto alignment function supports easy operation.



*Manual alignment may be required for patients with poor fixation.

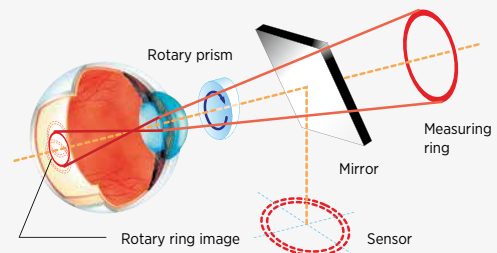
- Topcon's Rotary Prism Technology™ for unparalleled accuracy
- User friendly
- Compact & modern design
- 8.5 inch LCD touchscreen panel
- Connectable LAN

The KR-800 & RM-800 auto kerato- and refractometers incorporate the very latest in design technology and ergonomics. The units feature a bright 8.5 inch color touchscreen panel to control the main functions and an improved joystick operation due to a 23% reduction in weight from the previous models. Topcon systems have been renowned for their accuracy due to the proven Rotary Prism Technology™.

The compact footprint and design of the KR-800 and the RM-800 will save space and add functionality to the contemporary eye care practice.

The LAN connectivity for data export and the drop-in printer in front of the instrument ensure versatile use of the KR-800 and RM-800.

Rotary prism measuring system



Lens meters

CL-300

- LCD color touch panel
- Compact slim body
- Automatic mono- & multi-focal detection
- UV transmittance measurement
- Green measurement light beam

The Topcon CL-300 is a computerized lens meter with a touchscreen panel and UV meter.

The compact, ergonomic design of the Topcon CL-300 and intuitive colored touchscreen ensure that measurements can be easily and quickly obtained.

The CL-300 automatically detects and measures all types of lenses, including progressive lenses. Contact lenses can easily and comfortably be measured with the Topcon CL-300 as well. Due to the green light reading beam, ABBE compensation is no longer required.

The UV measurement function provides information on the ultraviolet transmittance in the range of 0% to 100%, providing reliable measurement results for eyeglasses and sunglasses.



	CL-300 PL	CL-300 DPL
PD measurement	●	●
Printer	●	●
LAN connection	●	●
Standard marking	Ink cartridge with white ink	Steel needles with red ink

The Topcon LM-8 makes measuring lenses with a low range cylindrical power very easy. The combination of high magnification optics and the excellent wide field eyepiece make this possible.

The LM-8 is battery operated. The LM-8 lens meter has an improved optical system and a LED illuminated target for glare-free viewing and fatigue free operation.

The instrument also features a cartridge type marking device and a redesigned eyepiece.

- LED illumination target
- Battery operated
- Built-in prism compensator



Slit Lamp LED type



SL-2G

LED Slit Lamp



SL-D4 LED

Digital Slit Lamp



SL-D701

Digital Slit Lamp

Slit Lamp halogen type



SL-D2

Digital Slit Lamp



SL-D301

Digital Slit Lamp



SL-D4

Digital Slit Lamp

Slit lamps

SL-2G | SL-D4 LED | SL-D701 | SL-D2 | SL-D301 | SL-D4 | DC-4 | BG-5



- LED illumination: prolonged life time
- Three magnifications: 10x, 16x, 25x for daily general practice
- Blue & red-free filter: improve diagnosis
- Various accessories, such as tonometer and yellow filter: improves workflow
- Short construction: user-friendly ergonomics (short ocular distance to patient)

The SL-2G has excellent clear optics and an ergonomic construction. The optics are of the Galilean type. This model can be equipped with accessories such as Topcon Fundus Viewer FV-1L and the Goldmann tonometer.

The Topcon SL-2G slit lamp is a basic slit lamp in Topcon's product range. The SL-2G has a LED light source which is economical and environmentally friendly. The SL-2G is the most economical model in the Topcon slit lamp range. It provides renowned Topcon quality and sufficient flexibility to cover the basic needs of the general practice.

The LED light has an approximate life time of 10,000 hours which is 100 times longer than conventional halogen bulbs. The LED light source offers a uniform and consistent illumination. The SL-2G slit lamp incorporates 10x, 16x and 25x magnifications, furthermore it incorporates blue and red-free filters.

Goldmann tonometers, a yellow filter, the Topcon parallel binocular tube and the Topcon Fundus Viewer are optional.



- Clear and homogeneous LED illumination
- Five magnifications by rotating drum (6X, 10X, 16X, 25X, and 40X)
- Optional blue-free filter system¹
- Topcon's optical quality
- Amber filter for observation of vessels
- Compact and easy to use

¹Blue Free Filter is the combination of the optional accessory YELLOW FILTER UNIT and the blue filter built-in SL-D4 (Type:LED)

The SL-D4 LED is the latest addition to Topcon's D-Series Digital Slit Lamps.

It can be used as a conventional examination instrument or with the optional DC-4 integrated digital camera for high resolution imaging.

This slit lamp features LED illumination, excellent optics and five convenient magnification ratios, allowing it to be used across a wide variety of ophthalmic applications.



- Five magnifications: 6x, 10x, 16x, 25x & 40x for daily specialist use
- Halogen & LED illumination source available
- Four filters for enhanced examination
- Blue Free Filter™ system for 1.6x brighter fluorescein observation
- Oblique illumination prevents reflection
- Optimal clarity, color resolution & depth-of-field



The SL-D701 is a digital slit lamp which can be used with conventional halogen illumination or with LED illumination. The LED illumination allows observation under a brighter, homogeneous condition than the conventional halogen illumination. LED illumination ensures consistent color temperature during light intensity adjustment. Due to a shorter LED wavelength easier visualization of details in the anterior chamber and vitreous such as flare and inflammation is obtained.

The SL-D701 incorporates four filters which can be selected; a cobalt filter, red-free filter, neutral density filter and an amber filter. The amber filter improves the contrast and color of retinal observation. The SL-D701 has 12.5x eyepieces and converging binocular tubes with a parallel magnification body (6x, 10x, 16x, 25x and 40x) for extremely sharp stereoscopic observation. As standalone the joystick trigger button of the SL-D701 provides an illumination boost for detailed observation, available for halogen illumination and LED illumination.

SL-D701 Blue Free Filter™

The SL-D701 Blue Free Filter™ exists of a combination of a special exciter filter and barrier filter (factory option). This Blue Free Filter™ system ensures a 1.6x brighter fluorescein observation than the conventional cobalt filter. Tear flow details and scars can be clearly viewed with less glare or pooling.

Digital applications

The SL-D701 slit lamp incorporates a cable management system, if used as a digital slit lamp. The SL-D701 will seamlessly integrate with:

- DC-4, a 5 megapixel camera
- BG-5, background illumination / meibography system
- Topcon Fundus Viewer FV-1L

Options

The SL-D701 has options such as a yellow filter diaphragm filter to increase depth-of-field, tonometer mount, parallel binocular tubes, assistant observation tube and various relay lenses.



The SL-D2 digital slit lamp has the same product features and options as the SL-D4, except for the magnification. The SL-D2 has two less magnifications.

The SL-D2 has standard 12.5x eye pieces and converging binocular tubes with a parallel magnification body with 10x, 16x, and 25x magnification for remarkably sharp and comfortable stereoscopic observation.

Digital applications

The SL-D2 slit lamp has a cable management system, if used as a digital slit lamp.

- SL-D2: three magnifications: 10x, 16x, 25x for daily general practice
- Optimal clarity, color resolution & depth-of-field: easy diagnosis
- Compact & user-friendly



SL-D301



The Topcon SL-D301 is a classic and economical slit lamp especially designed with the optometry clinic in mind. The SL-D301 is a stereoscopic converging bio-microscope with excellent optics of the Galilean type, which produces a sharp and clear view. The halogen illumination and 9 mm field of view in combination with 3 magnification selections (10x, 16x & 25x) assist you in a wide range of screening applications.

The SL-D301 is compatible with the optional Topcon DC-4 digital camera which offers high resolution still imaging, video capabilities with auto exposure and smart capture function.

- Three magnifications; 10x, 16x & 25x
- Blue filter, red-free filter, ND filter, UV cut filter & IR cut filter
- Halogen illumination
- Topcon DC-4 digital camera compatible



The SL-D4 is part of Topcon's digital slit lamp series. This digital slit lamp can be used as a conventional biomicroscope or as a slit lamp with several imaging options.

The SL-D4 incorporates three filters: a blue, red-free and an amber filter. The amber filter improves the contrast and color of retinal images.

Digital applications

The digital camera DC-4 seamlessly integrates with the SL-D4 slit lamp.

The SL-D4 digital slit lamp has many options such as a yellow filter and background illumination.

- SL-D4: five magnifications: 6x, 10x, 16x, 25x, 40x ideal for viewing details, for daily specialist practice
- Optional DC-4 digital camera: a modular system
- Small footprint: compact & space saving unit providing ease of use
- Short construction: user-friendly ergonomics (short ocular distance to patient)
- All cables are integrated in the slit lamp arm: aesthetic





- Infrared cut filter to capture meibomian glands
- Five megapixel CMOS chipset
- Plug & play installation
- Smart capture function
- Auto exposure function
- Easy capture with slit lamp joystick button
- IMAGEnet® software included

The DC-4 is a digital camera for capturing still images or videos for detailed analysis and diagnosis. The DC-4 has a five megapixel CMOS chipset for a crisp capture similar to the binocular observation quality. The DC-4 is very user friendly, images and videos are made by pushing the joystick of the slit lamp. Incorporated is an infrared cut filter for sensitivity of infrared illumination of BG-5, capturing and making meibomian glands clearly visible.

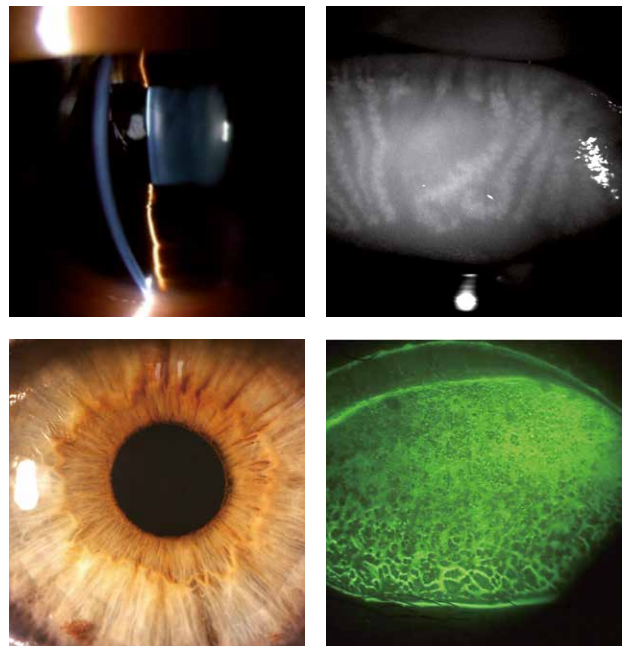
Smart capture function

The DC-4 digital camera has a smart capture function. It is possible to rapidly obtain a series of five images of which the best picture can be selected. The smart capture function minimizes failed images or blurry pictures, especially with children and in conditions of excessive blinking.

Auto exposure function

By adjusting the shutter speed and sensor gain, the brightness of the image will be automatically compensated. As a result the binocular observation and the final picture will have the same color balance.

The Topcon DC-4 also comes with the basic IMAGEnet® software and is compatible with the Topcon SL-D Series slit lamps.



The Topcon BG-5 background illumination consist of a white LED source. The background illumination is required to use for overview images with low magnification and will provide a shadow free observation with natural colors. For the background illumination two apertures are available which result in a high and low brightness.

The BG-5 also provides infrared illumination that illuminates the meibomian glands to assess its integrity. The observed images can be displayed on a computer screen and captured with the Topcon digital slit lamp camera, DC-4. The BG-5 can be mounted on Topcon slit lamp model SL-D701 exclusively.

- Provide infrared illumination which enables observation of meibomian glands
- Adapts to Topcon slit lamp SL-D701
- Provides shadow free observation



Optimize workflow and grow your practice with guided binocular refraction.



Refraction

It is time to reinvent refraction.



Chronos offers binocular autorefractometry, keratometry measurements and visual acuity with subjective testing. Chronos is a single space-saving instrument that optimizes your workflow.



Delegate

SightPilot™ is a guided refraction system that simplifies the exam and facilitates delegation.



Grow

Chronos offers the versatility critical for growing your practice.



Save space

Chronos combines binocular autorefractometry and keratometry measurements with binocular subjective testing and visual acuity in a single instrument that occupies minimum space.

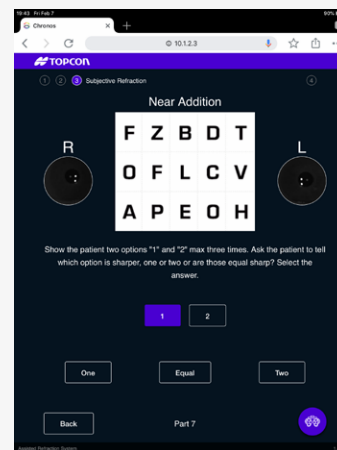
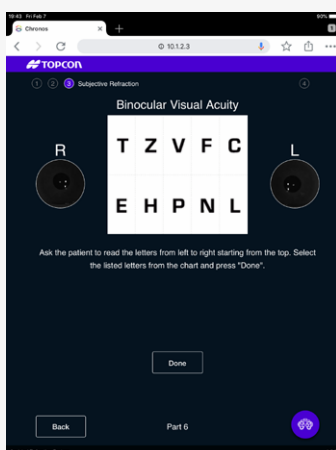
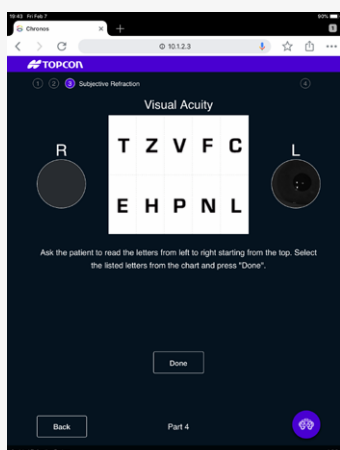
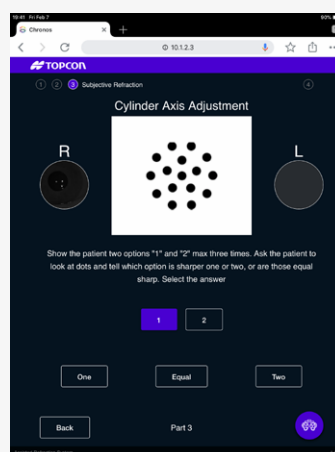
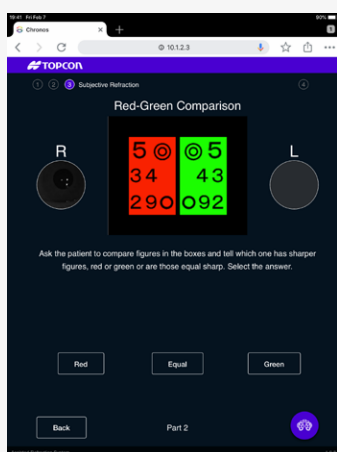
Chronos reduces the number of conventional refraction lanes and additional refractometers needed.

Chronos offers RTC (Remote Tablet Control) for social distance protocol.*

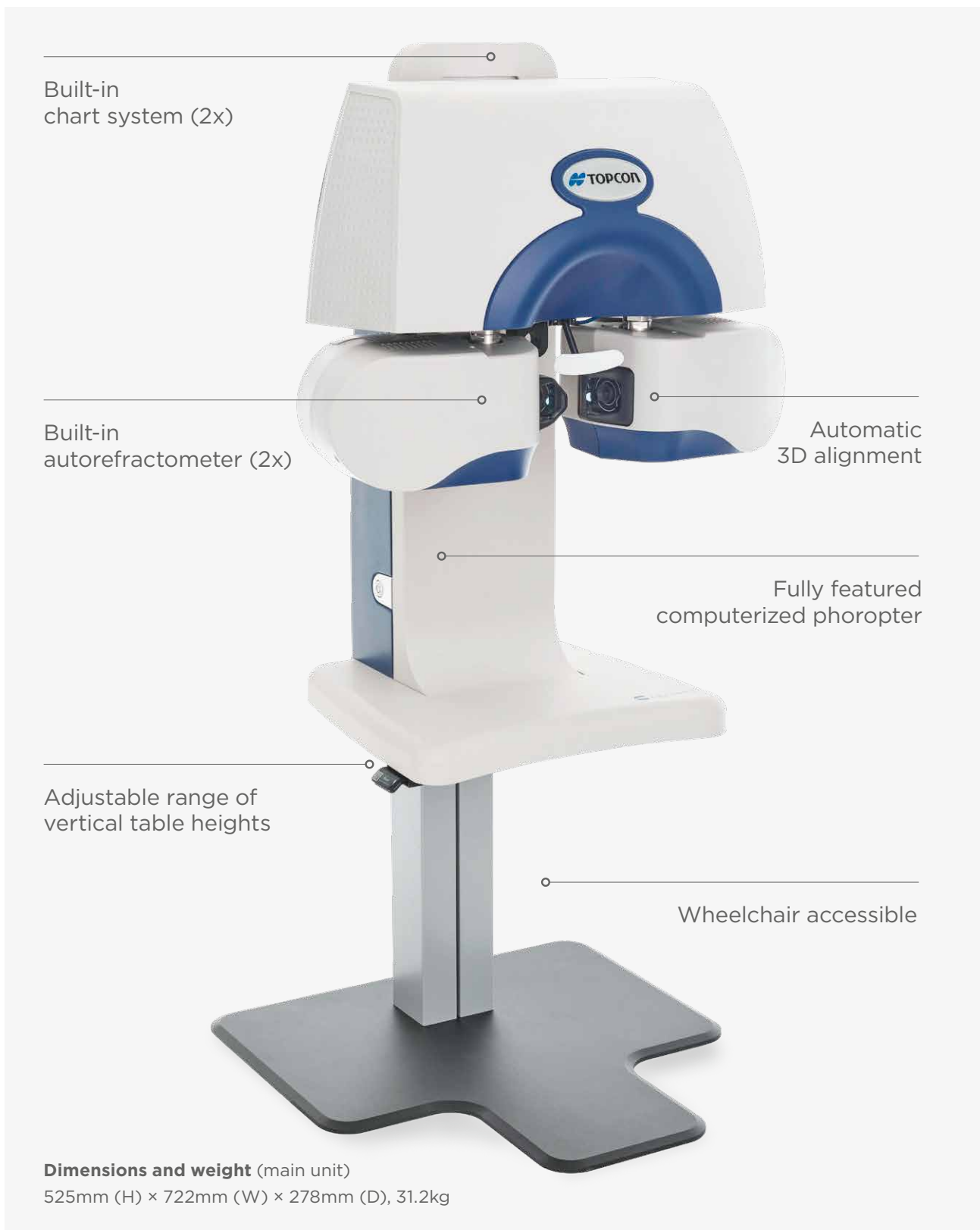
* Applicable distance is subject to the device's communication performance and the communication environment.

- SightPilot™ simplifies the user interface to provide a step-by-step guide through the refraction process.
- At each step, the operator is given instructions to proceed with the refraction, based on the patient's response.

SightPilot™ is optimized for understanding and efficient workflow, facilitating delegation when required.



Product description



Vision testers

CV-5000PRO Phoropter

Topcon's CV-5000PRO automatic phoropter sets quality standards. Fast lens rotation provides comfort for user and patient. The compact and contemporary design enhances the professional image of the practitioner. Due to the compact design the refractionist can monitor the patient's expression during refraction. To perform the near tests, the near chart illumination is incorporated into the CV-5000PRO.

The CV-5000PRO automated phoropter can be controlled by a tablet, by the Topcon KB-50S controller or by PC software operation.

- Compact design
- Fast lens rotation
- Versatile operation
- Near chart LED illumination



KB-50S control panel

Through the use of the KB-50S control panel the operator can control all functions of the CV-5000PRO automated phoropter. The KB-50S is equipped with a large color LCD touchscreen, providing the best overview on refraction results in the market. The KB-50S contains a sales support function. The practitioner is able to show his patient the benefits of various spectacles such as multifocal glasses. The KB-50S shows explanation of presbyopia, myopia and hyperopia to the patient.

PC software operation

The CV-5000PRO can also be operated through a PC. A unique operating system allows the operator to use his own PC hardware. The layout of the user interface ensures a good overview of the refraction data.

Monitor & mouse

Monitor and mouse can be connected to the internal PC of the CV-5000PRO system. This entry level set-up is also one of the three options to choose from for controlling the CV-5000PRO phoropter.

CV-5000 Tablet

By using a tablet you will have full control of both CV-5000PRO automated phoropter and the CC-100 series LCD vision tester completely wireless. This tablet controller fits seamlessly in a network for import and export of refraction data as well as printing all test reports. The wireless flexibility allows the user to move the CV-5000 Tablet controller to other examination rooms. The CV-5000 Tablet incorporates all refractive tests and visual acuity formats such as LogMar, decimal and feet. The refraction sequence is stored as a user pre-set. CV-5000 Tablet operation such as swiping is integrated in the refraction process, such as masking the optotypes and changing the power, in combination with the CC-100 series.

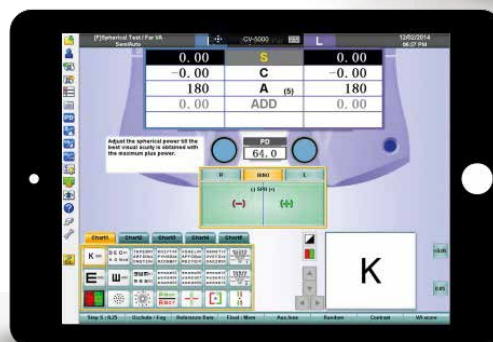
- KB-50S, large 10.4 inch LCD touchscreen
- Dial operation
- Sales support functions
- User friendly interface
- IMAGEnet® connection



PC Software



KB-50S



CV-5000 Tablet

The VT-10 vision tester is a basic phoropter in the Topcon product range. The VT-10 is a reliable no-nonsense vision tester which has a wide array of lenses in order to perform all the refractive tests you need.

Synchronized cross cylinders

The VT-10 is equipped with a cross cylinder that automatically rotates in conjunction with the set cylinder axis. Special gearing automatically synchronizes the rotation of the loop each time the cylinder axis correction is changed.

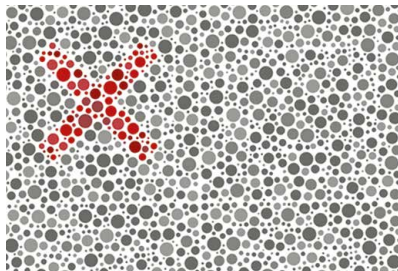
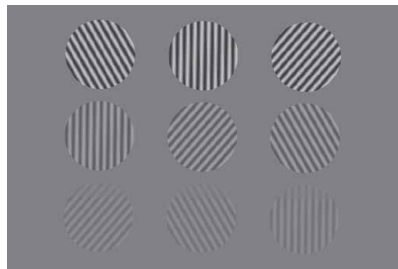
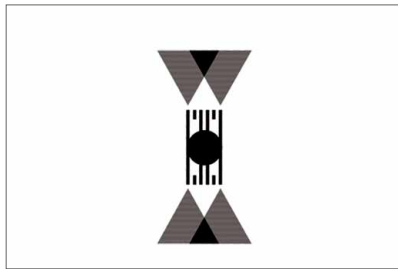
Easy convergence system

A convergence system allows natural conditions for near testing. Multicoated lenses for superior optical performance. The coating eliminates flare, ghost images and reflections. The multicoated lenses assure clearer, brighter images with improved contrast.

- Wide testing range
- Synchronized cross cylinders
- Convergence system
- Multicoated lenses
- Easy to operate



Chart systems



The Topcon LED LCD chart system contains all important visual acuity, binocular, color vision and contrast sensitivity tests. The most remarkable feature is the Topcon patented circular polarisation.

Spatial frequency contrast sensitivity test

A unique feature is the availability of the spatial frequency contrast sensitivity test which provides quantitative and qualitative information about the patient's contrast visual acuity.

Circular polarisation

Image separation for binocular testing is created through a specific polarisation technique which is unique to LCD test charts. This unique polarisation technique provides 100% image separation, without any "ghost images". Circular polarisation provides equal background color for both eyes.

The CC-100XP is a 22 inch LCD screen with high resolution, high contrast and high brightness. CC-100XP can be operated by the Topcon CV-5000 automated phoropter, by a remote controller, or by a wireless CV-5000 Tablet solution.



- 22 inch LCD screen
- 100% polarisation
- Wide range of optotypes
- Virtually unlimited test charts
- Spatial Frequency contrast sensitivity test
- White Maddox LED light source
- MKH test sequence according to Haase
- WiFi & USB connection
- CV-5000 Tablet ready

The CC-100 is a versatile solution to present charts to patients. The high resolution 22 inch LCD monitor ensures a clear and bright chart display.

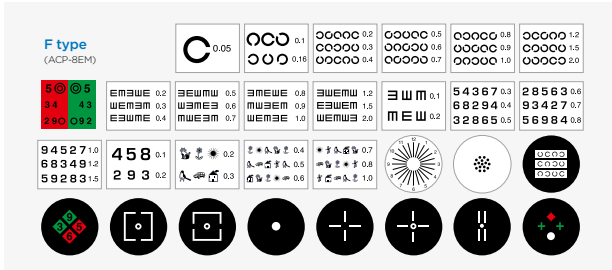
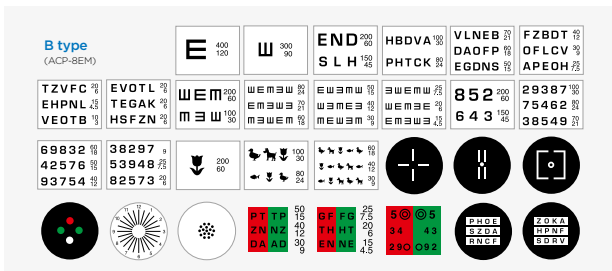
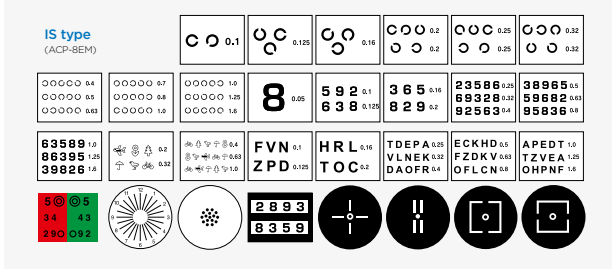
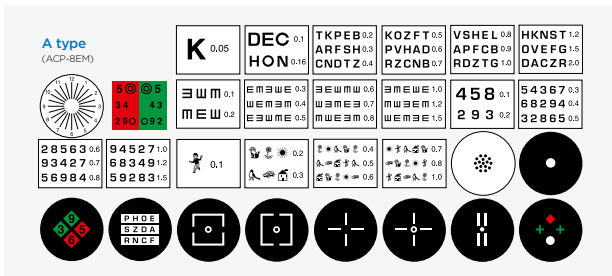
The CC-100 provides image separation through red and green images. All common known visual acuity tests are available including ETDRS. The design of the CC-100 fits seamlessly to other Topcon refraction products.

Both the CC-100 and CC-100XP can be operated by Topcon's CV-5000 CV system using a PC, the KB-50 one-dial controller or a wireless tablet. It is also possible to operate the CC-100 by a remote controller.

- 22 inch LCD screen
- Wide range of optotypes
- Virtually unlimited test charts
- White Maddox LED light source
- MKH test sequence according to Haase
- WiFi & USB connection
- CV-5000 Tablet ready

CC-100





The Topcon ACP-8EM chart projectors provide sharp images and image projections with a fast chart disc rotation. The remote controller allows a fast and simple chart projection of 30 test charts at a rate of 0.03 seconds per chart frame. The enlarged projection size of 330 x 270 leaves a clear and wide view. This chart projector shows five optotypes per line and the possibility to mask visual acuity lines or show a single optotype.

- Easy operation
- Connection with CV-5000 system
- 30 built-in charts
- Masking of optotypes



Wavefront analyzer

- 5 functions in 1 (wavefront aberrometry, corneal topography, refractometry, keratometry & pupillometry)
- Unsurpassed reproducibility & reliability
- Automated r/l measurement & touch panel manipulation
- Decision support for cataract & refractive procedures
- Increased patient throughput through efficient workflow
- Wavefront image sequence
- Simulated visual acuity (VA) assessment
- Full auto alignment
- Easy operation & handling
- Integrated evaluation software

The Topcon KR-1W is the only wavefront & topography system to offer both refractive and diagnostic functionalities. The instrument can be used for wavefront aberration, corneal topography, pupillometry, keratometry and auto-refraction. All measurements are performed by one push on the joystick.

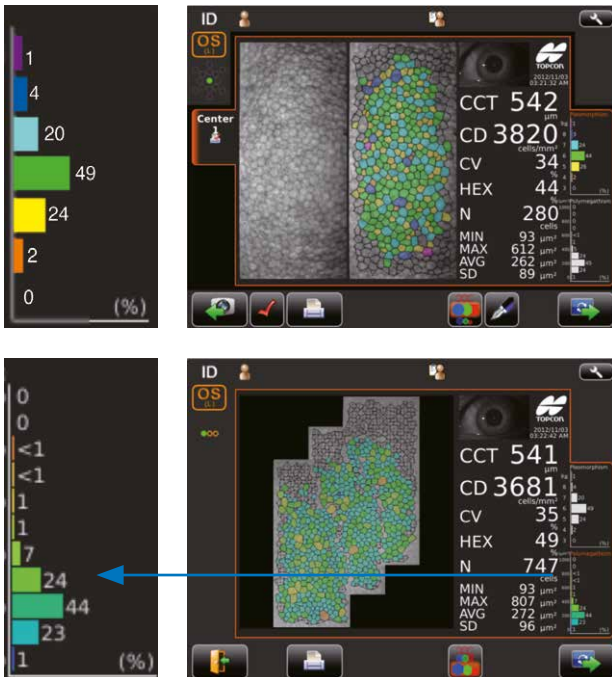
The Topcon KR-1W will help speed up your workflow, improve communication with patients and monitor the outcomes of your treatments.

The KR-1W wavefront & topography system has an auto alignment system, for increased ease of use and user-friendly operation.

This 5 in 1 unit provides you with the ideal tool to diagnose, follow up and make treatment plans for a broad range of ocular conditions, resulting in increased efficiency in your practice and patient satisfaction.



Specular microscope



The Topcon specular microscope SP-1P has a modern ergonomic design and innovative features that simplify its use and increase its efficiency.

A large 10.4 inch rotatable touch panel monitor eliminates the need for a control lever and can be turned to various angles for better interaction with the patient. By simply tapping on the centre of the patient's pupil displayed on the monitor the SP-1P automatically centres, focuses, acquires and analyzes the endothelial cell image.

The entire operation takes a few seconds, it is fast, smooth and requires minimum training. The space saving features combined with its ease of use makes the SP-1P the instrument for a new generation in eye care.

- Wide Angle "panorama" photography mode - substantial size increase of the analyzed area
- Two specific photography modes - sequence course & free style course
- Quick automatic measurement & analysis - instant acquisition of the analysis result & intuitive operation
- Easy-to-read screen & comprehensive analysis software - frequently referred values are shown on top & a pleomorphic / polymegathic histograms can be shown with color



Operation microscopes

OMS-800 Series

Components

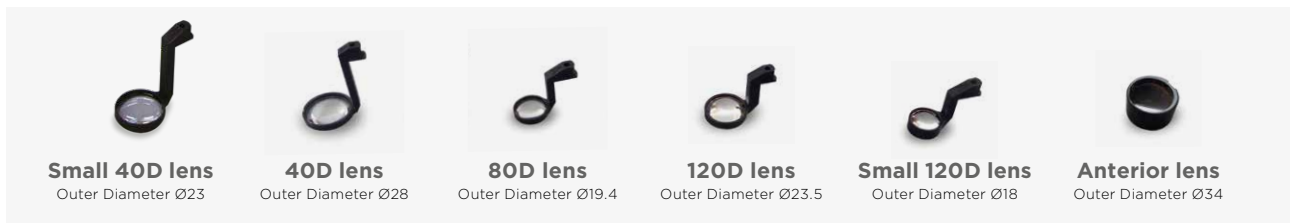
	OMS-800 OFFISS	OMS-800 OFFISS CBS	OMS-800 Pro	OMS-800 Pro CBS	OMS-800 Standard	OMS-800 Standard CBS
OFFISS	○	○	-	-	-	-
Electromagnetic locking	○	○	○	○	-	-
Coarse focusing	○	○	○	○	-	-
Inverter	○	○	-	-	-	-
Achromatic optics	○	○	○	○	○	○
Beam splitter	○	-	○	-	○	-
Changeable beam splitter	-	○	-	○	-	○
Illumination angle	Full Illumination ($\pm 2^\circ, +4^\circ$) / $\pm 2^\circ$ / Yellow Filter ($+4^\circ$)					

OMS-800 OFFISS

OFFISS offers an enhanced scope of possibilities in vitreoretinal surgery. Equipped with the OFFISS lenses mechanism, electromagnetic brakes and sophisticated electronics, this model provides the highest specification for intravitreal surgery, as well as other ophthalmic procedures.

OMS-800 OFFISS CBS

The CBS model offers a changeable beam splitter control using a lever, allowing the beam to be split 80/20 or 50/50. When connected to a TV camera, the 50/50 mode allows clearer TV images for documentation or teaching purposes.



OFFISS Lenses (OFFISS: Optical Fiber Free Intravitreal Surgery System)

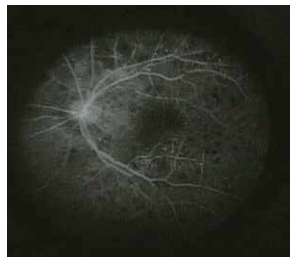
Topcon has developed a state-of-the-art observation system for vitrectomy procedures that does not require the use of fiberoptic illumination. The Topcon OFFISS lenses avoid complicated focusing by allowing the microscope head and indirect lens to move independently of each other, facilitating a clear focused image at all times. The image inverter activates automatically whenever the OFFISS is in use. The indirect lens can quickly and simply be exchanged for another, saving time and increasing efficiency.

OMS-800 PRO

Electromagnetic brakes and sophisticated electronics provide the OMS-800 PRO with the flexibility to facilitate virtually any type of ophthalmic surgical procedure.

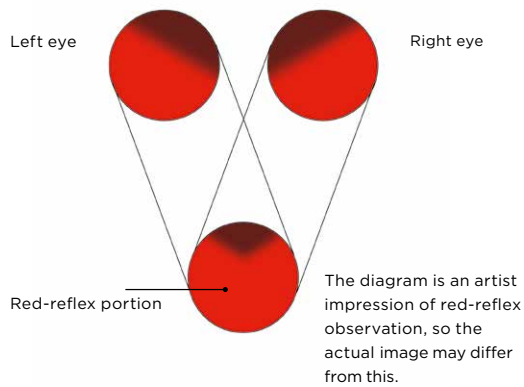
OMS-800 Standard

Equipped with most of the features of the OMS-800 range, the OMS-800 Standard answers the need for a simpler, easy to use operation microscope. Manual brakes and ease of mobility make the OMS-800 an affordable yet advanced unit for all ophthalmic procedures.



Intraoperative fluorescein observation

With this attachment, the surgeon can perform fluorescein angiography during the surgery, allowing real-time assessment of the retinal condition. Available with OMS-800 OFFISS only.



Coaxial illumination

The designed illumination system of the OMS-90 assures the finest optical performance. The optical system has been fitted with an innovative design that allows the surgeon to view a sharper image with more clarity than ever before.

The illumination system of the OMS-90 produces a superior red-reflex image for assistance in surgical procedures. As shown in the diagram, the innovative system design merges two improved fields of views to produce an enhanced red-reflex and an unparalleled image quality.

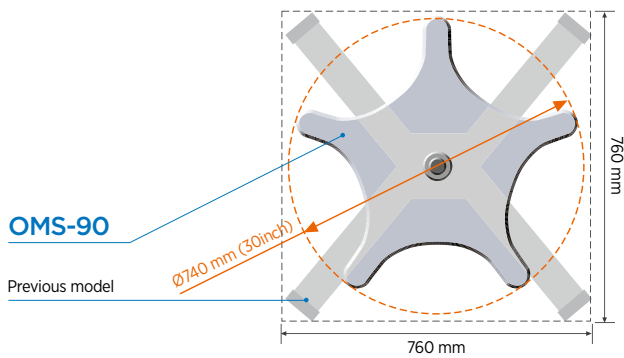
- Coaxial illumination
- Stain-proof coated objective lens
- Parallel binocular tube
- PD Adjustment Knob
- Built-in yellow filter
- Compact base





Built in yellow filter

The flip in/out yellow filter is built into the system to allow full protection against retina phototoxicity.



Compact base

The sturdy and compact $\varnothing 740$ mm (30 inch) base is designed for optimal use of limited operating room floor space.



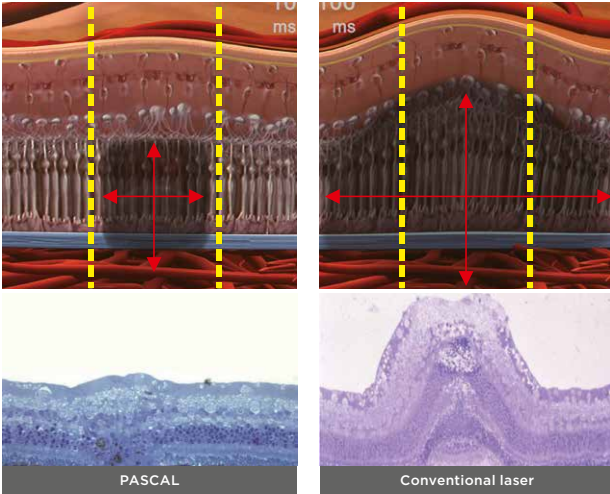
Industry Leading PAttern SCAnning Laser Technology



Laser system



The PASCAL product line is now manufactured by Iridex and distributed by Topcon in Asia Pacific and EMEA markets.



Less pain, less destruction

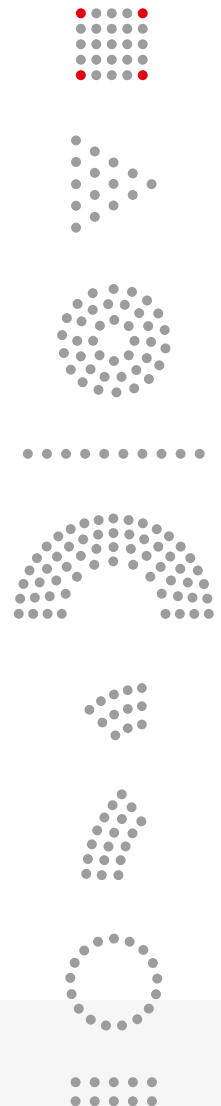
More painful, cellular destruction

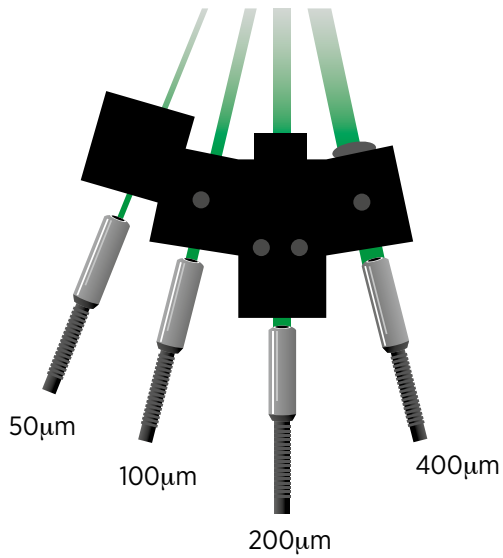
Experience the PASCAL advantage

Superior technology and input from clinical experts have resulted in a laser system that treat patients faster, safer and more effectively with greater comfort. The best tool for you, the best treatment for your patients.

Faster procedures, less damage

Unlike conventional laser burns, PASCAL's shorter pulse duration (10 ms) results in faster procedures with less pain, collateral damage and scarring for your patients.





Precision spots with multi-fiber beam technology

PASCAL's proprietary multi-fiber beam delivers results in easier to focus, predictable and uniform spots. Physicians using PASCAL lasers continue to share that the consistency of the burn during photocoagulation is "better" than competing lasers. This is due mainly to the wide depth of focus from the multi-fiber beam optics found in all PASCAL lasers.

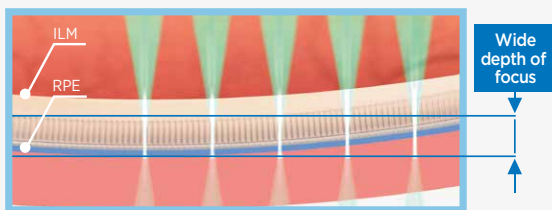
Unique fiber beam design

PASCAL incorporates separate fibers (one for each spot size) into each system. Compared to other technologies, PASCAL's unique fiber beam design offers a more consistent and focused spot size for each treatment.

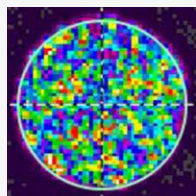
- Longer & more constant depth of focus for all spot sizes
- Consistent uptake at each spot
- Uniform & consistent energy distribution for all spot sizes

PASCAL multi-fiber beam delivery

Delivers multiple spots onto the retina, ensuring consistent uptake.

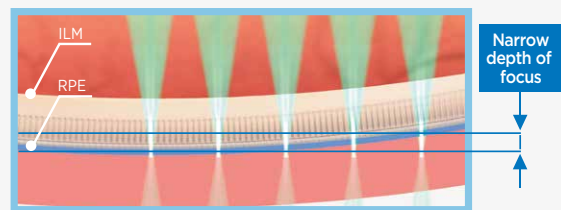


PASCAL has uniform energy distribution

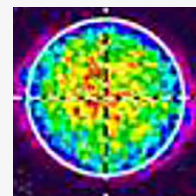


Other lasers

Zoom optics and narrow depth of focus may compromise the ability to scan a larger area with consistent uptake.



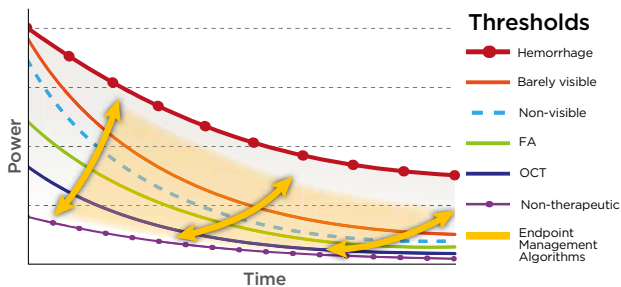
Other lasers have "hot spots" in the beam profile





Sub-Threshold, non-damaging Endpoint Management™

Endpoint Management (EpM) is a non-damaging* retinal laser therapy that uses a unique algorithm to control laser power and pulse duration, optimizing the therapeutic effect of the laser at sub-visible levels.



By using Endpoint Management with PASCAL lasers, you can adjust the treatment from barely visible down to various non-damaging levels, even down to completely non-detectable points while maintaining clinical efficacy. All of this adds up to safer, more effective treatment for your patients.

Endpoint Management is mathematically precise

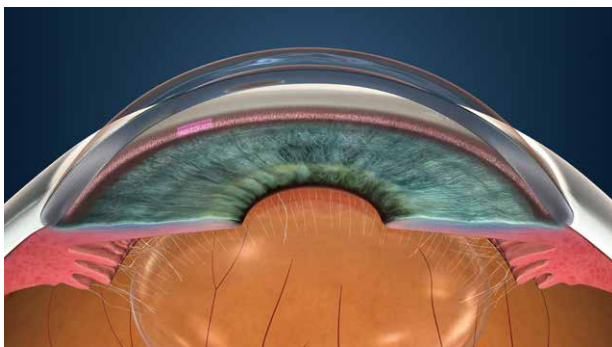
The Arrhenius Integral coupled with extensive data on retinal laser-tissue interactions defines the algorithms for Endpoint Management. By use of this formula, heat induced changes in the retina are controlled as Endpoint Management simultaneously modulates the laser power and duration, providing linear control over a non-linear process.



PSLT (Pattern Scanning Laser Trabeculoplasty™)

The advantages are clear:

Pattern Scanning Laser Trabeculoplasty (PSLT)¹ is an advanced tissue-sparing laser treatment for reducing intraocular pressure in open angle glaucoma. PSLT provides a rapid, precise and minimally traumatic computer-guided treatment that applies a sequence of patterns onto the trabecular meshwork. Automated rotation of consecutive patterns ensures that treatment steps are precisely placed without overlap or excessive gaps.



1 PSLT is an optional software and not available in all countries, please check with your distributor for availability in your country.
 2 Patterned Laser Trabeculoplasty. M. Turati, et.al, Ophthalmic Surgery Lasers and Imaging, 41:538-545 (2010).

- Computer guided treatment
- Non-destructive procedure
- Clinical studies show an IOP reduction of 24% in 6 months²
- Ability to retreat if necessary

*Depending on the parameters of Endpoint Management

Instrument tables

ATE-800

Whether it is a digital slit lamp with digital camera, an OCT or a non-mydratic fundus camera, this workstation offers a compact, clean and clear working environment. Monitors, PC and cables will be neatly installed, due to a unique cable management system.

The ATE-800 table is wheelchair friendly and has a unique elevation stroke which is very comfortable for patients.

The basic table can be upgraded with several accessories such as a PC holder, a tray for a printer or a key board tray.

- Versatile desktop design
- Unique stroke of 350 mm (minimum 628 mm & maximum 978 mm)
- Storage for PC, keyboard & printer
- Unique cable management system
- Robust rubber shielded wheels
- Patient friendly design



ATE-700(PC), ATE-600, ATE-650

The ATE-700 is a Topcon MDD certified instrument table which is wheelchair accessible due to two separate elevation support columns. This table is suitable to accommodate one or two instruments. The ATE-700 PC version is especially designed to accommodate instruments which needs PC support. The extended table top of the ATE-700 PC version supports storage for a high end tower PC. The table top is available in white with a wooden edge finishing. The elevation stroke is 300 mm, and controlled by an easy accessible control panel, which can be programmed to memorize three predefined table heights. For safety reason the ATE-700 (PC) is equipped with a safety stopper. The ATE-700 (PC) is most suitable to accommodate Topcon's slit lamp range.

- The ATE-700 (PC) is most suitable to accommodate Topcon's slit lamp range.
- Large stroke of 300 mm
- White table top with wooden edge finishing
- MDD certified
- Wheelchair accessible
- Digital control panel
- Three table top height memories
- Safety stopper
- Small footprint
- ATE-700 PC for PC storage
- Optional castors available

The Topcon ATE-600 instrument table has a central column and is available with three different table tops:

- a table top for one instrument
- a table top for two instruments
- a V-shape table top for two instruments

The ATE-650 has a fixed table top with the column on the side. This fixed table top is available in white.

- Maximum workload 80 kg
- Motorized elevation



ATE-600



ATE-700 (PC)

ATE-700

ATE-300

- Large stroke of 300 mm
- Table top available in two colors: white & grey
- MDD certified
- Wheelchair accessible
- Stable floor support
- Small footprint

The ATE-300 is a Topcon designed MDD certified ophthalmic instrument table with a central support column and a stable floor support which is wheelchair accessible.

The ATE-300 table top is especially designed and prepared for Topcon slit lamps, for easy installation of the chinrest and power supply. The table top finishing consists of a durable laminated scratch resistant top layer with a dark grey rubber profile to protect the edges.

The ATE-300 is available in a silver/white combination, the elevator stroke is 300 mm and controlled by an easy accessible control panel. The ATE-300 has high quality castors with locking mechanism that enables easy rolling of the table.



- Modern design
- Table top for one & two instruments available
- Space saving
- Simply & easy operation of the table top
- Easy wheelchair accessibility
- Large stroke of table top
- Standing & sitting position usability
- Workstation with monitor & keyboard support

The IC-1 is an innovative concept and an efficient solution for presenting instruments in your consulting room. This IC-1 instrument column is wall mounted, resulting in a very small footprint, saving you valuable floorspace and making it easy access for cleaning the floor. The IC-1 is available in two colors and can be set-up for one or even two instruments. The adjustable elevation of the table top allows for seated or standing operation of your instruments.

With the additional option of a monitor and keyboard support, this IC-1 instrument column will turn into a complete flexible workstation, which is also easily accessible for wheelchair patients. The IC-1 in combination with Topcon's Auto-Refractometer KR-1 or KR-800, along with Topcon's Tono-Pachymeter CT-1P, is the perfect solution to provide complete refractive eye care on a single square meter.



The IC-1E instrument column is part of the successful IC-1 series. In comparison to the IC-1, the IC-1E enables you to use the complete table top as a work area. The IC-1E is available with a table top for one instrument or a large table top which accommodates two instruments. The table top comes in two colors: white & blue.

The IC-1E is unique in its compact dimension and small footprint. Similar to the IC-1, the IC-1E instrument column has a remarkable large stroke of 600 mm. IC-1E is especially designed with Topcon's joystick free touchscreen instruments in mind.

- Innovative unique design
- Extremely space saving
- Easy wheelchair accessibility
- Large table top elevation stroke of 600 mm
- Standing & sitting position usability
- Table top available for one or two instruments



Instrument stands and chairs

IS-1P

- Two instrument electrical driven parallel sliding table top
- Touchscreen control panel
- Automated linear phoropter arm VT-1L
- Powered elevation of table top
- Synchronized movement of phoropter arm with table top
- Integrated cable management system
- Wheelchair accessibility (right version)
- Various options such as monitor support & curtain control
- Large IS-1P PC-desk
- OC-14 fully reclinable ophthalmic chair available

The IS-1P is a parallel unit which is mainly designed for ophthalmic clinics and is supplied with a powered linear sliding table top to accommodate two instruments. The VT-1L linear automated phoropter arm can be synchronized with the movement of the table top, horizontally and vertically. The optional monitor support allows installation of a TFT monitor for user convenience such as slit lamp imaging. The optional desk will seamlessly fit to the table top which creates a larger work space and accommodation of your PC. Like IS-1 and IS-1D, this unit can be upgraded with several accessories.

The IS-1P has an option for fully automated chair movement and various functionalities can be synchronized such as curtain control, room light control and instrument auto power on/off switching. The IS-1P is controlled by a touchscreen control panel, and is available in a right version as well as a left version and a wheelchair accessible version, in various fashionable color combinations.



- Unit for three instruments
- Available in fashionable colors
- Unique touchscreen control panel
- Integrated electro brake & curtain control

The IS-1D is a unit with a rotatable table top for three instruments, which comes as standard with two electro-brakes controlled by a footswitch. Similar to IS-1 the table top can be elevated.

The IS-1D is available in right and left version as well as a wheelchair accessible version. You can choose a single trial lens drawer or a three drawers version which can optionally accommodate the power supply of the Topcon CV-5000PRO system.

The IS-1D is controlled by a touchscreen control panel for all functionalities as well as the movement of the chair. The standard curtain control, room up-light, and instrument auto on/off switching make the IS-1D a versatile ophthalmic unit for your eye care practice. The dedicated PC-desk will complete the set-up for all your needs.



IS-1

- Unit for two instruments
- Available in fashionable colors
- Unique touchscreen control panel
- Both left or right configuration

The IS-1 series developed by Topcon is an ergonomic working station with full integration of Topcon instruments. A smart cabling system and predefined electronic control are part of this integration.

The Topcon IS-1 series is a versatile range of furniture for eye clinics and optician stores. There is a nearly unlimited combination of colors and configurations. A wide range of accessories will suit all needs for a modern workstation. All units from this range are available in wheelchair versions.

The IS-1 is a workstation for optician stores or eye clinics. The basic unit supports two instruments on a rotatable sliding table top which can be elevated as well. The IS-1 is operated by a touchscreen panel. The unit is available in right or left set-up and can be upgraded with optional modules such as drawers, desks, and several phoropter arms. The IS-1 can be equipped with a fully reclinable chair or a chair with a fixed back, in several colors.



The Topcon IS-600III has been developed as a refraction unit without compromise. The IS-600III is a comfortable and stable workstation to accommodate two instruments which can be adapted to various kinds of examination rooms.

The IS-600III is available in a right version, a left version and in a wheelchair version. All of these versions are available with a fixed table top or electrical elevation of the table top. The IS-600III comes in blue and white, the OC-6 chair comes in blue, grey, black and red.

The IS-600III can be completed with several optional accessories such as; three different phoropter arms, OC-6 footrest, extra drawers, table top electro brake and a LED reading light. The integrated control panel allows the user to control the elevation of the chair, the room illumination light and installed instruments.

- Small footprint
- LED reading light
- Electric elevation of table top
- Dimming of room light
- Table top electro-brake
- Wheelchair accessibility

IS-600III fixed column

The IS-600III with fixed column to the elevated table top in combination with the automated linear phoropter arm VT-72/74, ensures that the same eye level of instruments and phoropter will be maintained. With adjusting the height of the table top to the eyelevel of the patient, the phoropter is automatically adjusted to the same eyelevel resulting in a quick workflow.

- Column movement with table top
- Same eyelevel for all instruments



IS-100

- Small footprint
- Capacitive control panel
- Large chair elevation stroke with smooth and silent movement
- Scratch resistant and easy to clean tabletop

Topcon IS-100 has a modern design and allows two instruments on a swivel type tabletop. Its simplicity and basic functionality for an affordable price level makes the IS-100 Instrument Stand the perfect solution for the optician and optometry market. The innovative IS-100 is available in a right and left setup. The tabletop surface is scratch resistant, fingerprint proof and easy to clean. The elevation movement of the chair provides a long stroke for easy access and is very smooth and silent. The IS-100 accommodates all types of slit lamps and it provides clean cable management. Two ergonomic types of chairs are available to use with this Instrument Stand: one basic version with arm and footrests (OC-8) and a full reclinable version with footrest (OC-9). The ophthalmic chair OC-8 and OC-9 is available with a large chair elevation stroke to provide easier access.



The FS-1 floor stand consists of a versatile column and a stable baseplate, providing an economical solution suitable for the examination room as an alternative refraction lane.

This floor stand has a small footprint and accepts several models of phoropter holders such as a balanced phoropter arm or a parallel phoropter arm as well as a chart projector bracket and a convenient reading light.

The up-light fits seamlessly in the FS-1 design providing a homogeneous room light. The FS-1 can be combined with Topcon's OC-6 ophthalmic chair or one of the IS-1 series ophthalmic chairs, such as the OC-10 or OC-12.

The small baseplate with integrated wheels permits an easy displacement of the ophthalmic chair for easy wheelchair accessibility. The optional dark grey cabinet accommodates Topcon's CV-5000 controller KB-50S as well as the CV-5000 power supply for easy printout access.



- Small footprint
- Economical alternative refraction lane
- Column guided cable management
- Variety of accessories
- Up-light room illumination
- Right & left hand use
- Wheelchair accessible

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.

*Not all products, services or offers are approved or offered in every market, and products vary from one country to another.
Contact your local distributor for country-specific information and availability.*

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