# Easy operation

#### **Fully automated measurement**

A sophisticated instrument does not have to be difficult to use. At the touch of a button, the TRK-1P automatically measures both eyes gathering valuable information accurately and quickly.



#### Manual alignment mode

A manual alignment mode is available whenever the operator wishes to override the automated features.

#### **Indicates measuring Mode by Color**

The TRK-1P shows which mode is processing during the measurement. A display appears with an orange bar when in REF/KRT measurement and a blue bar when in TONO/ PACHY measurement.

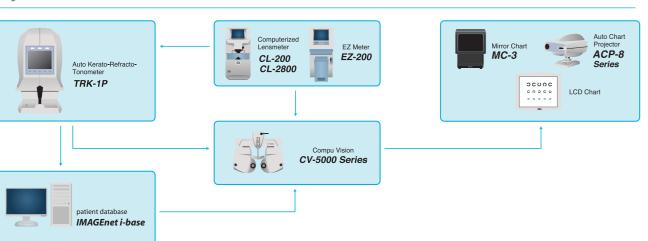
# Benefit

#### Space saving

Combining the conventional Auto Refractometer/ Keratometer with Tonometry and Pachymetry saves the space of having two additional instruments. The TRK-1P has a small footprint and can be set up to export information to other devices and EMR systems, improving work flow.

The TRK-1P saves your practice time. Moving the patient from one station to another is no longer required, and during the measurement process the operator is "hands free" to perform other tasks. Connectivity to the CV-5000 Automated Vision Tester allows for a quick and easy upload for subjective testing.

# System Chart



#### **Specifications**

REF Measurement	
Measuring range	Hyperopia: 0 to +22D (0.12D/0.25D steps)
	Myopia: 0 to -25D (0.12D/0.25D steps)
	Astigmatism: 0 to $\pm$ 1OD(0.12D/0.25D steps)
	Axial angle: 0 to 180° (1° /5° steps)
Minimum measurable pupil diameter	Ø 2.0mm
Target fixation	Auto fog system
Kerato Measurement	
Measuring range	Radius of corneal curvature: 5.00 to 10.00mm(0.01mm step)
	Corneal refractory power: 67.50 to 33.75D (0.12D/0.25D steps)
	(Proviso: corneal refractive index = 1.3375)
	Corneal astigmatic power: 0 to ± 10D
	Corneal astigmatic axial angle: 0 to 180° (1°/5° steps)
Ocular Pressure Measurement	
Measuring range	0 to 30mmHg / 0 to 60mmHg
Working distance	11mm
Others	
Alignment	Color LCD monitor screen
PD measurement	Measuring range 85mm max., 1mm display unit
Measurement data display	Color LCD monitor screen
Measurement data recording	Built-in printer (10 measurements each of R/L eyes)
TV Monitor	6.5 type VGA color LCD monitor
External output terminal	RS-232x2, USBx1
Operating temperature	10° to 40°C
Main body travel	Distance 40mm back/forth, 90mm sides, 30mm up/down
Chinrest travel distance	60mm up/down (Electric)

#### Other Specifications

Dimensions	304(W) 521(D) 551-581(H)mm
Weight	27.0 kg
Power Supply	100-24V AC, 50/60Hz, 60VA/100VA





ubject to change in design and/or specifications without advanced notice. IMPORTANT order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.

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# **Auto Kerato-Refracto-Tonometer** TRK-1P





Topcon Deutschland GmbH

# Four times the diagnostic capabilities in one-fourth the space Topcon all new 4- in-1 Pre Testing Station - TRK-1P

The all new TRK-1P 4-in-1 instrument combines the latest technology into one compact unit. The TRK-1P features a complete Auto Alignment system, combined with an Auto Refractometer, Keratometer, Non-Contact Tonometer and Pachymeter. In addition, the incorporated pachymetry feature enables the IOP value to be compensated by the corneal thickness and provides more versatile tonometry diagnosis.



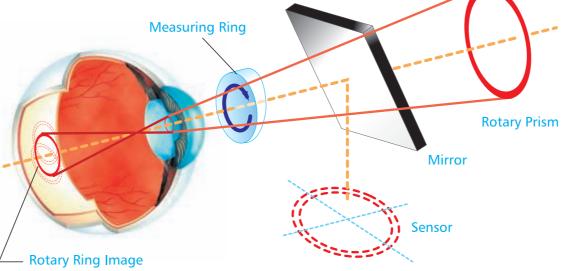
- Kerato-Refractometer, Non-Contact Tonometer and Pachymeter are now combined in one single unit
- Fully automated measurement
- TRK-1P "p" stands for pachymetry



### Advanced features Multiple functions and features



the TRK-1P provides unmatched accuracy and reliability. The innovative optical design incorporated into the TRK-1P Pallows for accurate and reliable measurements with a pupil as small as Ø2mm.





TRK-1P software controls the amount of air required for each individual eye. Your patient experiences more comfort during the measurement.



## **Pachymetry and reliable IOP measurements** The TRK-1P provides accurate and reliable intra

ocular pressure values. Studies show that the corneal thickness directly correlates to IOP measurements. The included pachymetry function assists the practitioner in evaluating the IOP related data. The calculated IOP value is corrected for thicker or thinner corneas compared to average. The integrated formula for IOP compensation can be customized by end users based on the latest clinical research.

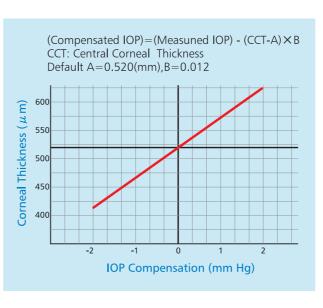


The intelligent non-contact safety mode prevents the instrument from touching the patient's eyes during TONO/ PACHY measurement. The instrument automatically calculates the distance to the eyes at REF/KRT measurement to safely perform TONO/PACHY procedure.



### Reduced nozzle maintenance

A new tonometer nozzle design helps to prevent debris from entering the chamber. This dramatically reduces the need for cleaning and maintenance.





#### Large color tilt screen

The new 6.5" VGA large color "tilt screen" LCD is dramatically improved for easier and smoother operations. It simultaneously displays the readings of both right and left eyes, and the settings menu with large color characters.



## Fast, easy-to-load thermal printer

Loading the thermal printer paper into the printer has never been easier. Just drop the printer paper into the receptacle and close the cover. The quick and quiet printer is ready to go. This improvement saves time and enhances workflow.



# **Auto thermal paper**

An added convenience is the automatic cutting of the printout after measurement.

## IMAGEnet i-base<sup>TM</sup>



### Integration in IMAGEnet i-base<sup>TM</sup>

Topcon TRK-1P integrates with the IMAGEnet i-base<sup>TM</sup> software system. All captured data (objective refraction, keratometry, tonometry and pachymetry) will be displayed in their own dedicated window. The captured data can be saved in the patient file and, if required, send to other applications, such as Topcon CV-5000 computerized phoropter.

