

AKR medica 500



THE 4-IN-ONE
SOLUTION



AKR medica 500

AUTO-KERATO-REFRACTOMETER TONOMETER PACHYMETER



K R Tn P

Optometry



THE 4-IN-ONE SOLUTION

ULTRA COMPACT
AND ULTRA PRECISE

The **AKR medica 500** is an auto-kerato-refractometer, tonometer and pachymeter, combining 4 essential measurements in an ultra compact design, to optimise both workspace and work time.



TIME & SPACE SAVER

- A comprehensive easy-to-use 4-in-1 tool.
- Compact design for optimal integration in all workplaces.
- Fully automated measurement cycle on both eyes.

K

R

Tn

P

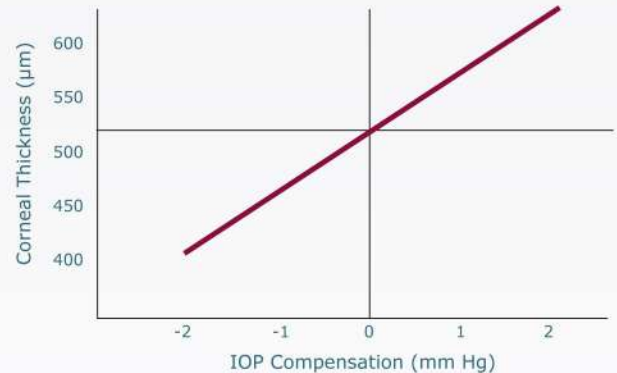


EASY & SMOOTH OPERATION

- Large adjustable color screen and optimised user interface to simplify the operating process. Both right and left eyes data are simultaneous displayed for convenient readings.
- Non-contact tonometry with regulated air-flow to minimize patient stress. The instrument automatically calculates the appropriate distance to the eye to prevent touching the eye patient.

$$(\text{Compensated IOP}) = (\text{measured IOP}) - (\text{CCT} - A) \times B$$

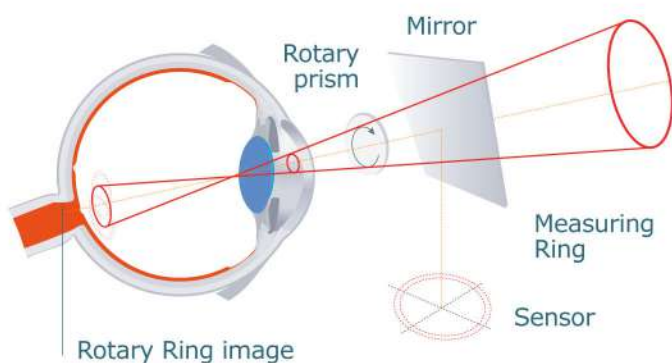
CCT : Central Corneal Thickness



CORNEAL THICKNESS MEASUREMENT

- Extremely precise objective data, even on small-diameter pupils and damaged retinas (rotary prism technology)
- More reliable tonometry tests through the pachymetry. The intraocular measurement is adjusted, based on cornea thickness (calculation rule based on several medical studies).

ROTARY PRISM TECHNOLOGY



A technology which makes the difference even in most complex cases.

The rotary prism method ensures objective measurement reliability, precision and regularity. The original optical system, measures a wider area on the retina to ensure optimal results, even on small-diameter pupils.

AUTOMATED REFRACTION CHAIN

The AKR medica 500 can be fully interconnected to the APH 500 to create an optimised refraction chain.



Objective refraction from AKR



Previous prescription from lensmeter



- Optimized management of the refraction data workflow
- Pre-adjustment for a quick and precise vision test

SPECIFICATIONS

Refraction measurement		Keratometry measurement	
Sphere	-25.00D ~ +22.00D (0.12D and 0.25D)	Corneal curvature radius	5.00 to 10.00 mm (0.01 mm)
Cylinder	-0.00D ~ ±10.00 (0.12D / 0.25D)	Refraction index	1.3375
Axis	0° ~ 180° (1° / 5°)	Corneal refraction	67.5D to 33.75D (0.12D / 0.25D)
Minimum measurable pupil diameter	ø 2mm	Corneal astigmatism	0D to ± 10D (0.12D / 0.25D)
Tonometry measurement		Astigmatism axis	0° to 180° (1° / 5°)
Non-contact	•	PD measurement	85 mm maximum (1mm)
Measuring range	0 to 30 mmHg / 0 to 60 mmHg	Release	Automatic semi-automatic - manual
Screen	Color LCD monitor screen	Dimensions and weight	304 (W) X 521 (D) X 551-581 (H) mm - 27 Kg
Integrated printer	•	Power-supply	100-24V AC, 50-60Hz, 60VA / 100VA
External output terminal	RS 232C, USB 1.1	CE Conformity marking	

PRODUCT FUNCTIONS



Rotary prism technology



Regulated air puff



Data transfer



K Keratometry



R Objective Refraction



Tn Tonometry



P Pachymetry