

ARK-1a AUTOREFRACTOR/KERATOMETER



UNIQUE FEATURES INCLUDE:

- **Retro-illumination:** Reveals lenticular opacities
- **Accommodation:** Documents accommodation reserves
- **Multiple pupil zone imaging method:** Gives a reliable refraction starting point



ARK-1a AUTO REFRACTOR/KERATOMETER

SPECIFICATIONS

Objective refractive error measurement	Spherical refractive error	-30.00 to +25.00 D (VD = 12 mm) (0.01/0.12/0.25 D increments)			
	Cylindrical refractive error	0 to ±12.00 D (0.01/0.12/0.25 D increments)			
	Cylinder axis	0 to 180° (1°/5° increments)			
	Minimum measurable pupil diameter	ø2 mm			
Accuracy: The accuracy specifications are based on the results of eye model testing performed in accordance with ISO10342, Ophthalmic Instruments-Eye Refractometers.					
	Criterion	Measurement range	Maximum scale	Test device ^a	Tolerance
	Spherical vertex power	-15 D to +15 D (Maximum meridional vertex power)	0.25 D	0 D, ±5 D, ±10 D ±15 D	±0.25 D ±0.50 D
	Cylindrical vertex power	0 D to 6 D	0.25 D	Sph: approx. 0 D Cyl: -3 D Axis: 0° 90°	±0.25 D
	Cylinder axis ^b for cylinder power	0° to 180°	1°		±5°
^a The refractive error of the test device shall not differ by more than 1.0 from the nominal value above.					
^b Cylinder axis shall be indicated as specified in ISO8429.					
Corneal curvature radius measurement	Corneal curvature radius	5.00 to 13.00 mm (0.01 mm increments)			
	Corneal refractive power	25.96 to 67.50 D (n = 1.3375) (0.01/0.12/0.25 D increments)			
	Corneal cylindrical power	0 to ±12.00 D (0.01/0.12/0.25 D increments)			
	Corneal cylinder axis	0 to 180° (1°/5° increments)			
The measuring range is in accordance with Code A, ISO 10343 and the measuring accuracy in accordance with Code 2, ISO 10343.					
Pupillary distance measurement	30 to 85 mm (1 mm increments) (For near vision: 28 mm to 80 mm when the near working distance is 40 cm)				
Corneal size measurement	10.0 to 14.0 mm (0.1 mm increments)				
Pupil size measurement	1.0 to 10.0 mm (0.1 mm increments)				
Accommodation measurement	0 to 10.00 D (0.01/0.12/0.25 D increments)				
Other functions	Observation/Display method	6.5-inch color LCD			
	Printer	Thermal line printer with auto cutter			
	Interface connectors	RS-232C: Two ports USB: One port LAN: One port			
Power input	Voltage, frequency	AC 100 to 240 V ±10% 50/60 Hz			
	Power consumption	100 VA			
Dimensions	260 (W) mm × 495 (D) mm × 457 (H) mm				
Mass	20 kg				

