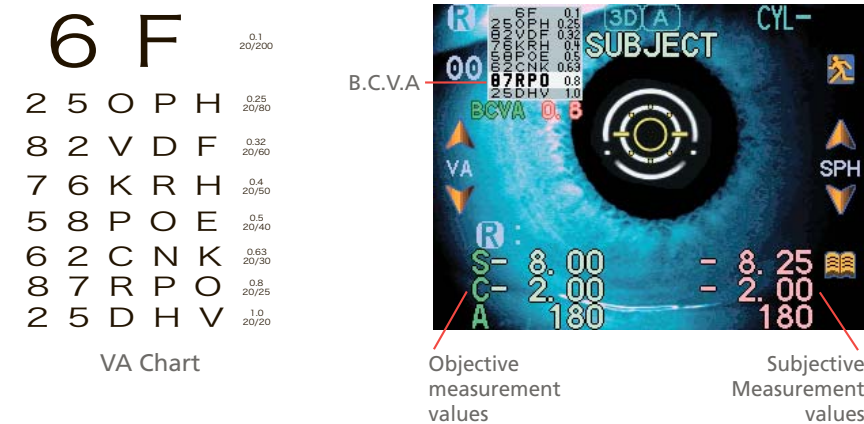


NIDEK's Innovative Auto Refractometer for Higher Precision and Better Operability.

World's Unique VA Measurement*

The AR-360A is the world's unique unit that provides visual acuity (VA) measurement. This function enables quick checkup of patient's refractive error by comparing subjective measurement with objective measurement. Even corrected visual acuity on near vision is measurable with easy operability, which allows proposal of progressive lens necessity.

*Only for the AR-360A



High Speed Printer with Easy Loading & Auto Cutter

The AR-360A / 330A / 310A incorporates a high speed and user-friendly printer, and the printer paper can be changed easily.



Auto Cutter



Easy Paper Loading

Printed data sheet will be cut by the auto cutter for quick and easy detachment.

EyeCare Card System*

The AR-360A / 330A / 310A incorporates the card slot for EyeCare Card system, which provides quick and easy wireless data transfer.

*The card is optional.

AR-360A / 330A / 310A Specifications

Model	AR-360A	AR-330A	AR-310A
Auto refractometer			
Measurable range	Sphere -30.00D to +25.00D (VD=12 mm) (0.01 / 0.12 / 0.25D increments) Cylinder 0D to 12D (0.01 / 0.12 / 0.25D increments) Axis 0° to 180° (1° / 5° increments)	←	←
Measurable minimum pupil diameter	ø 2 mm		
Chart	Scenery chart		
VA measurement			
Measurable range	less than 0.1, 0.1, 0.25, 0.32, 0.4, 0.5, 0.63, 0.8, 1.0 or less than 20/200, 20/200, 20/80, 20/60, 20/50, 20/40, 20/30, 20/25, 20/20		
Correction range	Sphere -20.00D to +20.00D (VD=12mm) (0.25D increments) Cylinder 0D to ± 8.00D (0.25D increments) Axis 0° to 180° (1° / 5° increments)	Not available	Not available
PD measurable range	30 to 85 mm (1 mm increments) (Near point PD: 28 to 80 mm at WD=40 cm)	←	←
Auto tracking & Auto shooting	X-Y-Z directions, Auto shooting	←	Y direction Auto shooting
Vision comparison	Corrected vision with spherical and cylindrical lenses	Corrected vision with spherical lens	Not available
Display	Tilttable 5.7-inch color LCD	←	←
Printer	Built-in thermal type line printer (Easy loading and auto cutter)	←	←
Interface	RS-232C (IN / OUT), USB, Eye care card system* *Card is optional	←	←
Power supply	AC100 to 240 V ± 10 % 50 / 60 Hz	←	←
Power consumption	100 VA	←	←
Dimensions & Weight	260 (W) x 481 (D) x 455 (H) mm / 20 kg 10.23 (W) x 18.93 (D) x 17.9 (H) " / 44.1 lbs.	←	←
Standard accessories	Spare printer paper, Power cord, Dust cover, Chinrest paper, Fixing pins, Model eye	←	←
Optional accessories	Interface cable, Barcode scanner	←	←

*Manufacturer
NIDEK Co., LTD.
34-14, Maehama, Hiroishi, Gamagori, Aichi 443-0038, Japan

Caution : U.S. Federal Law restricts this device to sale, distribution and use by or on the order of a physician or other licensed eye care practitioner.

*Specifications and design are subject to change without notice for improvement.

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AUTO REFRACTOMETER

AR-360A / 330A / 310A



Auto Refractometer AR-360A / 330A / 310A

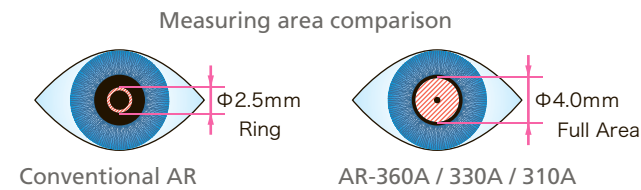
■ Excellent Measurement Accuracy

Highly Accurate Refractometer

The combination of new measuring principle - **Pupil Zone Imaging Method** - and unique technology - **SLD** - offers high accuracy and reliability in refraction measurement.

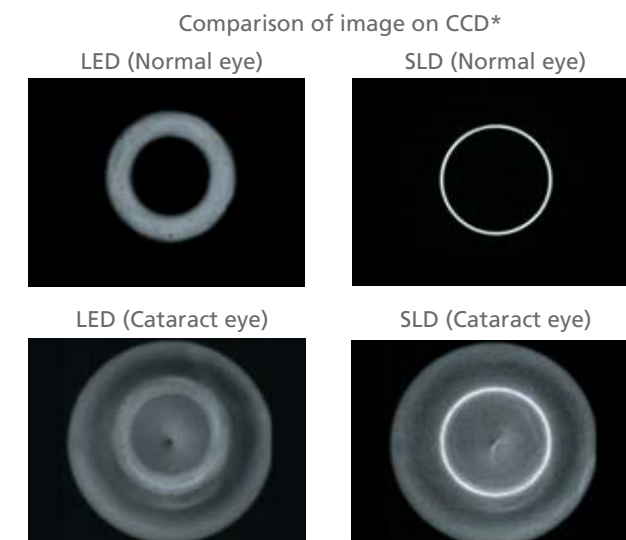
1. Pupil Zone Imaging Method

The NIDEK AR-360A / 330A / 310A adopts the advanced **Pupil Zone Imaging Method** for refraction measurement, which analyzes a wider area (Max. $\phi 4$ mm) to obtain more reliable and realistic data that is closer to subjective refraction.



2. SLD (Super Luminescent Diode)

The AR-360A / 330A / 310A uses the **SLD (Super Luminescent Diode)** and highly sensitive CCD device for improved image quality. The image with the SLD is sharper and clearer than those with the LED, and the system offers greatly improved measurement capability even with dense cataract and IOL implanted eyes.



*In-house trial data (Model eye)



■ Wide Measurement Range: -30 to +25D

The AR-360A / 330A / 310A offers the widest measurement range of -30 to +25D.

■ Smallest Measurable Pupil Size: $\phi 2$ mm

The AR-360A / 330A / 310A can measure small pupils down to 2 mm in diameter, allowing wider application.

■ Informative 5.7-inch Tiltable Color LCD

Clear image and data display with user-friendly guidance allow easier and more reliable operation. Projected double mire rings on the cornea help better observation of the corneal shape and irregular astigmatism.



■ 3D* Auto Tracking & Auto Shooting

The auto-alignment (X & Y directions), auto-focusing (Z direction) and auto-shooting provide faster, simpler and more accurate measurements. When alignment is performed correctly, measurement starts automatically.

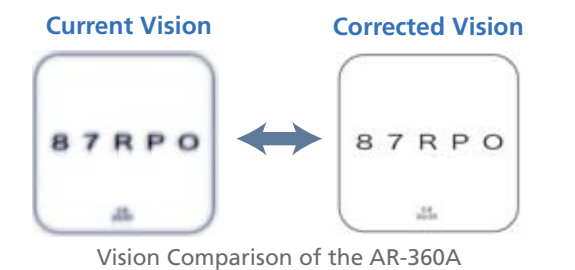


*3D : AR-360A / 330A

Model	Auto Tracking		Auto Shoot
	X-Y-Z	Y	
AR-360A	○		○
AR-330A	○		○
AR-310A		○	○

■ Recall Function for Vision Comparison

A comparison between patients' current vision of unaided eye or glasses-corrected*¹ eye and corrected vision with internal lenses of sphere and cylinder*² can be easily demonstrated.



*¹ Requires data transfer from a NIDEK auto lensmeter.
*² Spherical and cylindrical lenses only for the AR-360A. Spherical lens for the AR-330A. Not available for the AR-310A.

■ Motorized Chinrest

The motorized chinrest with simple up / down buttons facilitates smoother operation.



■ One-Touch Lock

The main body can be fixed with the advanced one-touch lock.