THE AKR THAT GOES BEYOND CONVENTIONAL OBJECTIVE REFRACTION







AKR 800 NV

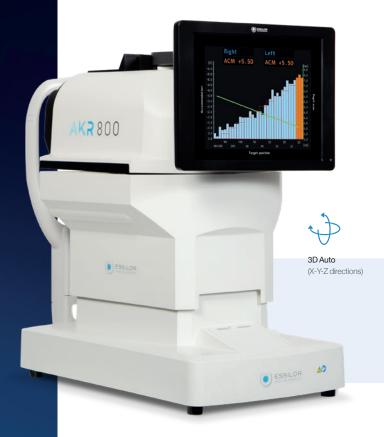
THE AKR THAT GOES BEYOND CONVENTIONAL OBJECTIVE REFRACTION

The AKR 800NV (Near Vision) autokerato-refractometer conducts fast and reliable objective refraction and keratometry.

The device allows you to conduct indepth eye assessments for contactology and media opacity screenings thanks to complementary measurements including automatic peripheral keratometry, white-to-white measurement and retroillumination imaging.

Easy-to-use and fully automatic, the AKR 800NV helps you better understand patient needs and guide them towards adapted solutions thanks to advanced features like night vision measurement and objective accommodation evaluation.





WHAT IS ACCOMMODATION AND WHY IS IT SO IMPORTANT?

Accommodation is the capacity of the eye to focus on nearby objects. As we get older, the eye's accommodative ability naturally reduces, making it more difficult to focus on close objects.

With the AKR 800NV, you can assess patients monocular accommodation status, enabling you to optimize your subjective refraction protocol and offer patients adapted solutions to improve their near vision.

1

DELIVER RELIABLE
OBJECTIVE REFRACTION
WITH GREAT USER
CONVENIENCE



2

HIGHLIGHT YOUR EXPERTISE WITH IN-DEPTH OCULAR ASSESSMENT



3

GUIDE PATIENTS WITH REFRACTION IN EVERYDAY LIFE CONDITIONS



Deliver fast refraction measurements in less than 20 seconds thanks to fully-automated alignment, focus and image capture. This allows you to take measurements in a single click, while benefiting from intuitive measurement modes to further gain time.

Rely on accurate measurements¹ even for smaller pupils (Ø 2.0mm), with objective refraction enabling you to optimize subjective refraction assessment.

Benefit from ease of installation and a flexible layout. Thanks to the device's small footprint and 180° rotating and 40° tiltable screen, it can be conveniently integrated into your store layout.

The efficiency and reliability you need to optimize day-to-day customer traffic management

Strengthen your expertise and precision in contactology thanks to automatic peripheral keratometry and white-to-white measurement.

Benefit from accurate corneal measurement to offer patients a more personalized service and prescriptions.

Assess media opacity using retroillumination imaging with LOCS III classification to educate patients about eye opacity while screening them for it and simultaneously secure subjective refraction.

Strengthen patient confidence through cutting-edge technology and expertise

Assess variations in refraction between day and night light conditions through scotopic, mesopic and photopic environments.

Evaluate near vision refraction status by measuring monocular accommodation from infinity to 20cm.

Raise patient awareness of night vision and the natural evolution of accommodative capacity and better understand patient needs to guide them towards adapted solutions.

Establish yourself as a trusted source of advice and guidance

TECHNICAL SPECIFICATIONS

REFRACTION MEASUREMENTS		
Sphere	-30D to +22D (step: 0.01/0.12/0.25D)	
Cylinder	0 to ±10D (step: 0.01/0.12/0.25D)	
Axis	0 to 180° (step: 5°/1°unit)	
Min pupil diameter	Ø 2.0mm	
Vertex distance	0mm; 10mm; 12mm; 13.5mm; 15mm	
Light environment	Photopic, Mesopic, Scotopic	
Auto tracking	3D Auto (X-Y-Z directions) or Manual	
Auto shot	Available	
Auto transition from right to left eye	Available	

KERATOMETRY MEASUREMENTS		
Corneal curvature radius	5.0 to 10.0mm (step: 0.01mm)	
Corneal refractivity	33.75 to 67.5D (step: 0.12/0.25D)	
Degree of corneal astigmatism	0 to ±10D (step: 0.12/0.25D)	
Axis Angle	1 to 180° (step: 5°/1°)	
Peripheral measurement	ф7.0mm	

OTHER MEASUREMENTS	
Pupillary distance	0mm to 85mm (step:1mm)
Pupil diameter	φ2.0mm ~ 8.5mm (step: 0.1mm)
Corneal measurement	φ12mm – (diagonal measurement: φ14mm (step: 0.1mm)

ADVANCED FEATURES		
Accommodation measurement	0 to 5D	
Retro Illumination	Included	

HARDWARE SPECIFICATIONS		
Screen	10.4 inches color LCD monitor (TFT) 180° rotatable, 40° tiltable	
Chinrest	Motorized	
Printer	Thermal line printer with auto-cutter	
Data output	LAN, USB-A, RS-232C	
Dimensions & weight	271 (W) x 464 (D) x 482-523 (H) mm – 22kg	
Power source	100-240V AC, 50/60Hz, 90VA	

(€ 0459

This is a medical device MDD Class Im. Legal manufacturer: Essilor International. For professional use only. Read attentively instructions for use.





www.essilor-instruments.com