



## World's most accurate handheld autorefractor

### Binocular and open view

Eliminates patient accommodation for maximum reliability

### Wavefront aberrometry

The most comprehensive method to measure ocular refractive errors

### Dynamic measurements

Produces results with high confidence

## APPLICATIONS

## Accurate for the clinic, durable for the field



### Mobile eyecare

Home visits • School and office screenings • Nursing homes



### Global health

Mission trips • Population health • Initiatives in low resource settings



### Eyecare clinics

Patient screening • Post-op • During pretest or refraction

### Binocular measurements in 10 seconds

- Accelerates subjective refraction with a more accurate starting point
- Enables high throughput autorefractor

### Accessible & easy to use

- Ideal for patients with mobility disabilities and/or physical challenges
- Easy to learn
- Works anywhere
- Patient friendly

### Field durable

- Calibration free
- Operates in humid and dusty settings
- Can be used indoors and outdoors, in most light settings
- Includes hardened carrying case
- Operates up to 8 hours on battery

## CLINICAL PERFORMANCE SPECIFICATIONS

Intended patient population	5–85 years old
Accuracy (agreement with subjective refraction)	<= 0.25 D: 60-70% of patients <= 0.5 D: 80-90% of patients (see publications)
Cylindrical range	-6D to +6D, increments of 0.01D, 0.125D, 0.25D
Axial range	0–180°, increments of 1, 5, 10 degrees
Spherical range	-10D to +10D, increments of 0.01D, 0.125D, 0.25D
Interpupillary distance range	47–78mm continuous
Accommodation control	Binocular open view
Pupil size	2–8mm
Cyclopeia requirement	None
Amblyopia or strabismus	May require monocular measurement
Contact lens wearers	Over-refraction compatible
Dilation requirement	None
Illumination requirements	Works in any illumination
Furniture requirements	None
Materials	This product is latex-free
Storage/transport	Travel hardshell case included

## TECHNICAL SPECIFICATIONS

Wavefront Refraction Engine™ technology patented by PlenOptika	
Technology	Wavefront aberrometry
Measurement mode(s)	Binocular and monocular
Measurement time	10 seconds
Calibration	Factory calibrated, no field calibration needed
Battery life	6–8 hours of operation; 6 hours charge time (10 hours for initial charge)
Communications	Bluetooth via QuickSee Companion App and Bluetooth printer
Measurement capacity	10,000 measurements
Regulatory	Class I product, FDA Class IIa product, CE
Laser safety	Class 1, enclosed
Electrical safety	Compliant with IEC 60601-1(2005, 3.1 ed.)
Weight	3.14lbs / 1.42kg (without case) 6.95lbs / 3.15kg (with case)
Dimensions	6.5 x 11 x 3.25 " / 16.5 x 28 x 8.25 cm
Warranty	1 year warranty

### Contact

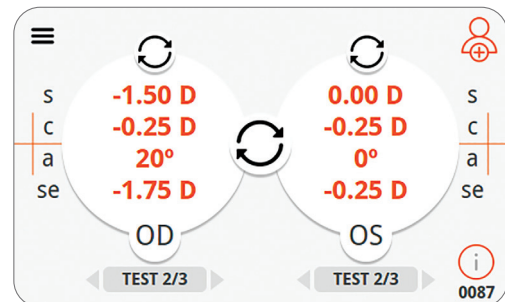
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User interface: Simple and intuitive

## KEY PUBLICATIONS

1. Durr NJ, Dave SR, Lim D, et al "Quality of eyeglass prescriptions from a low-cost wavefront autorefractor evaluated in rural India: results of a 708-participant field study" British Medical Journal Open Ophthalmology 2019;4:e000225. doi: 10.1136/bmjophth-2018-000225
2. Rubio M, Hernandez CS, Seco E, Perez-Merino P, Casares I, R. Dave SR, Lim D, Durr NJ, Lage E. "Validation of an affordable handheld wavefront autorefractor". Optometry and Vision Science, 2019 (accepted, in press)