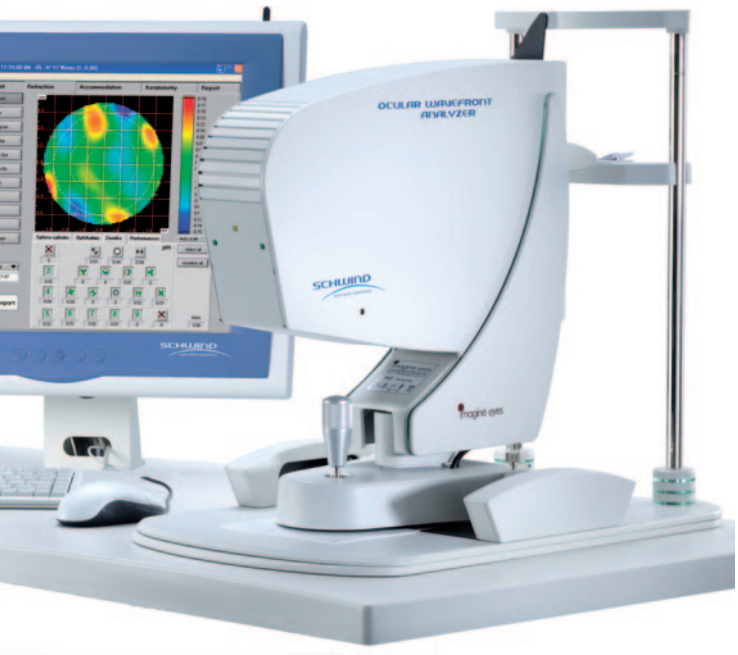
SCHWIND Ocular Wavefront Analyzer (Imagine Eyes)

The next generation of advanced aberrometer technology



Wavefront Accommodation Assessment

- Precise and objective measurement of the patient's accommodative response
- Analysis of accommodative refractive components in vivo (e.g. IOLs)

Integrated Pupillometry

- Detection of the scotopic pupil size [in mm] with the infrared pupillometer under dark room conditions

Keratometry

- Implemented keratometry function measuring the corneal curvature
- 3 D colour display of the K-readings [D and mm], visualizing the positions of the principal corneal meridians[1]

High Precision Aberrometer Technology

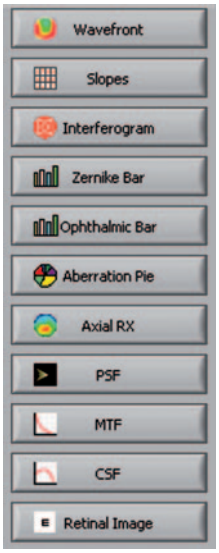
- Exceptional repeatability of 0.003 D RMS[2] thanks to patented Hartmann-Shack "one-shot" technology
- Excellent resolution (230 µm) and accuracy (1024 true optical measuring points)
- Expanded dynamic range of -15/+20 D sphere and +/- 10 D astigmatism

Customized Ablation

- Patient data are exportable to the SCHWIND ESIRIS and SCHWIND AMARIS excimer lasers with support of the SCHWIND-CAM

Comprehensive Ophthalmic Software Package

In the analysis panel each zernike coefficient can be individually selected for quick ocular wavefront interpretation:



Ocular wavefront error map	
Vector plot of ocular wavefront gradients	
Wavefront interferogram	
Colour bar graph of OSA Zernike coefficients	
Equivalent defocus coefficients	
Pie chart of the aberration distribution	
Axial refractive error map [D]	
Point Spread Function	
Modulation Transfer Function	
Contrast Sensitivity Function	
Optotype image simulation	

Specifications

Aberrometer	
Area of analysis at the eye pupil plane	7.2 mm x 7.2 mm
Number of sub-aperture	1024
Spatial resolution at the eye pupil plane	230 µm
Sphere range	+20 D to -15 D
Sphere measurement reproducibility[2]	0.003 D
Cylinder Range	±10 D
Cylinder measurement reproducibility[2]	0.003 D
Keratometer	
Curvature radius range	5 mm to 10 mm
Curvature radius reproducibility	0.02 mm
Analysis diameter (K-readings)	3 mm
Pupillometer	
Diameter range	2 mm to 10 mm
Diameter measurement reproducibility[2]	0.02 mm
General specifications	
Dimensions	L 54 cm x W 33 cm x H 50 cm
Weight	9.3 kg
Power supply – PC	100-240 VAC/60-50 Hz
Working temperature	15 °C – 35 °C
Compliance	CE conformity in accordance with Medical Device Directive (MDD) 93/42/EEC

Optimal functionality and reliability as well as compliance with all legal regulations can only be ensured through usage of products supplied by SCHWIND – whether as single component or as system combination.

[1] Flat meridian, steep meridian and average keratometry.
[2] In laboratory conditions using an artificial eye. Individual results may vary.

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