

VX130+

Succeed in all your diagnostics. Glaucoma and keratoconus detection, identification of patients for cataract surgery with premium and/or toric implants, identification of patients for refractive surgery. The VX130+ combines state-of-the-art technologies and provides essential data for optimal patient eye care. The VX130 is the ideal patient monitoring system.



Height	570 mm
Width	312 mm
Depth	530 mm
Weight	25 kg
Voltage	100-240 VAC, 50/60 Hz, 300 W

Glaucoma

Identification and monitoring

- Anterior chamber analysis
- Automatic measurement of iridocorneal angles
- Measurement of anterior chamber volume
- Measurement of anterior chamber depth
- Measurement of IOP (intraocular pressure)
- Measurement of corneal thickness
- Corrected IOP as a function of corneal thickness



Anterior chamber analysis



Corrected IOP as a function of corneal thickness



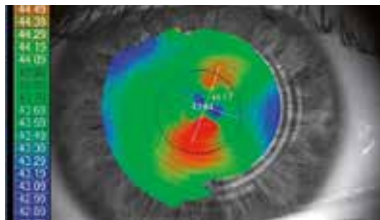


Keratoconus

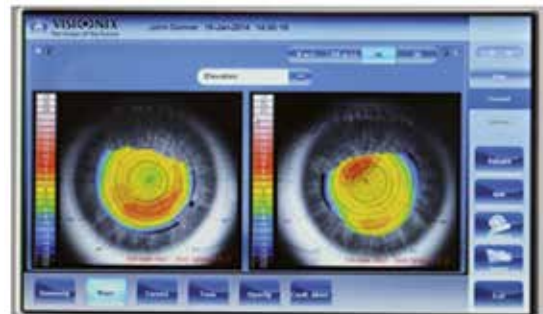
Identification and monitoring

Topography maps

- Axial, tangential elevation and refraction maps
- Keratoconus probability index (KPI)
- Keratoconus monitoring
- Internal astigmatism measurement
- Eccentricity and meridian tables
- Corneal aberrometry
- Measurement of total refractive power of the eye including anterior and posterior surface of the cornea
- Visualization of the anterior and posterior aspect of the cornea
- Anterior / posterior elevation map of the cornea



Eccentricity table



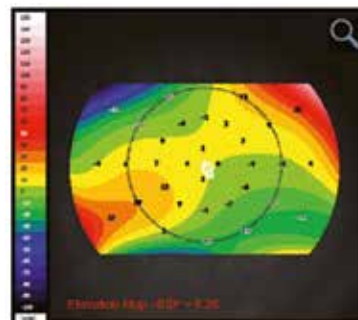
Identification of patients for cataract surgery

Topography of the anterior and posterior surfaces of the cornea

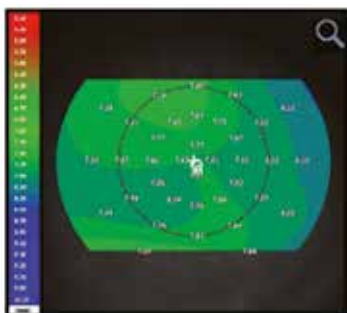
Complete analysis of the cornea

- Corneal thickness map
- Elevation maps
- Anterior and posterior axial, tangential, 3D maps
- Anterior and posterior keratometry, eccentricity
- Kappa angle

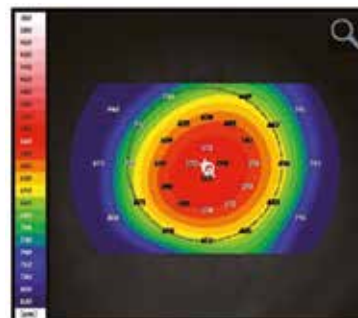
Combination of Scheimpflug imaging and corneal topography technologies used to generate thickness and elevation maps over a large corneal surface.



Posterior elevation map



Axial elevation map



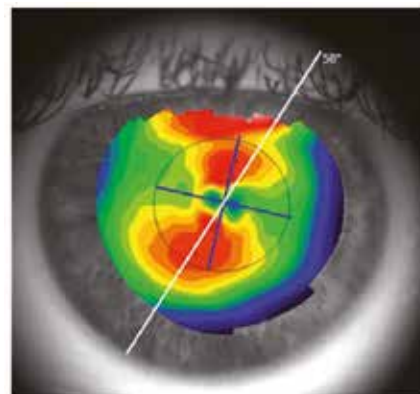
Total refraction elevation map

PRE-OP cataract surgery

- Visualization of crystalline opacities
- Analysis of wavefront aberrations, with the ability to separate corneal and lenticular/internal aberrations
- Internal astigmatism measurement
- Kappa angle for IOL centering
- Z.4.0 value for aspheric implant
- Lens opacity classification (LOCS II and III scales)
- Premium IOL candidate identification and monitoring
 - Aspheric or Spheric IOL
 - Multifocal
 - Toric
 - Multifocal toric

**POST-OP cataract surgery**

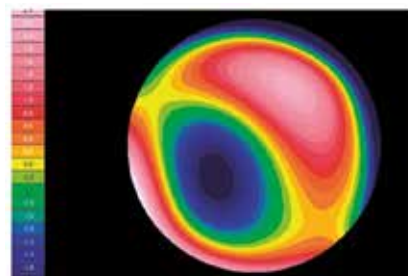
- Post-operative IOL check
- Toric lens implant axis alignment check
- Analysis of post-op output to improve surgery protocols
- Analysis of the total correction including the IOL



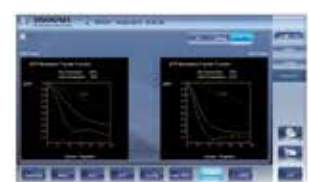
Toric lens implant axis alignment check

Vx130+ Complete refraction**Differentiate between day and night vision needs**

- Objective day and night refraction measurements
- 1300 points analyzed for a 7-mm diameter pupil
- Objective refraction under mesopic and photopic conditions
- Measures lower-order and higher-order aberrations
- Access visual acuity and quality of vision on a pupil as small as 1.2 mm
- MTF curve



Summary screen with day and night vision data



Objective day and night refraction measurements.

**TECHNICAL SPECIFICATIONS****GENERAL**

Alignment	XYZ automatic
Display	10.1" (1 024 x 600) TFT screen Multi-touch screen
Observation area	ø 14 mm
Medical device directive	EC MDD 93/42/EC modified by directive 2007/47/EC
Output	RS232 / USB / VGA / LAN

POWER MAPPING AND REFRACTION

Spherical power range	-20D to +20D
Cylinder power range	0D to +8D
Axis	0 to 180°
Measuring area	Min. ø 2 mm - Max. 7 mm (3 zones)
Number of measuring points	1,300 points
Acquisition time	0.2 sec
Method	Shack-Hartmann

PACHYMETRY, IC (IRIDOCORNEAL) ANGLE AND PUPILLOMETRY

Method	Continuous vertical scan with the Scheimpflug camera
Pachymeter measuring range	150-1300 µm
Pachymeter resolution	+/- 10 microns
IC angle measuring range	0°-60°
IC resolution	0.1°
Pupil illumination	Blue light 455 nm

RETROILLUMINATION**CORNEAL TOPOGRAPHY BY SPECULAR REFLECTION**

Number of rings	24
Number of measuring points	6,144
Number of points analyzed	More than 100,000
Diameter of covered corneal area at 43D	From 0.75 mm to more than 10 mm
Measurement range	From 37.5 D to 56 D
Repeatability	0.02 D
Method	Placido rings

TONOMETER

Measurement range	7 mmHg to 44 mmHg
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