

VX 130+

Diagnostic

Realize a full exam of the anterior segment of the eye
INCREASE THE SURGERY OUTCOME AND
DON'T MISS ANY DIAGNOSTIC

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.

glaucoma

cataracts

keratoconus

post-op follow-up

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

**SCHEIMPFLUG
IMAGING**

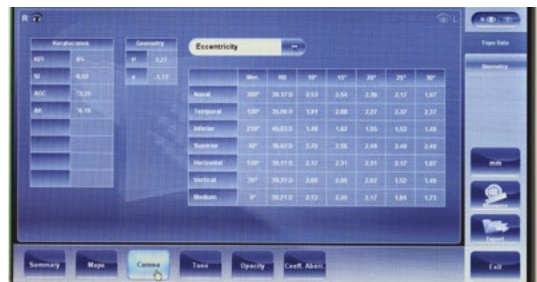
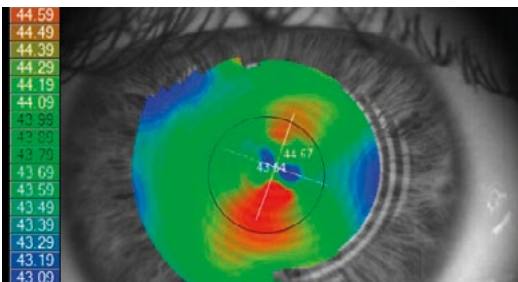
**NON-CONTACT
TONOMETRY**

KERATOCONUS

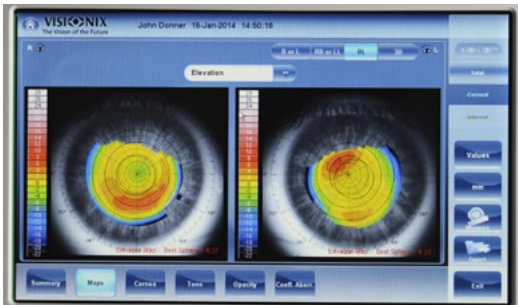
IDENTIFICATION AND MONITORING

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



PLACIDO DISK

**SCHEIMPFLUG
IMAGING**

SHACK-HARTMANN

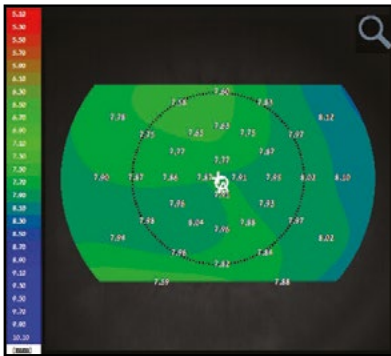
IDENTIFICATION OF PATIENTS FOR CATARACT SURGERY

TOPOGRAPHY OF THE ANTERIOR AND POSTERIOR SURFACES OF THE CORNEA

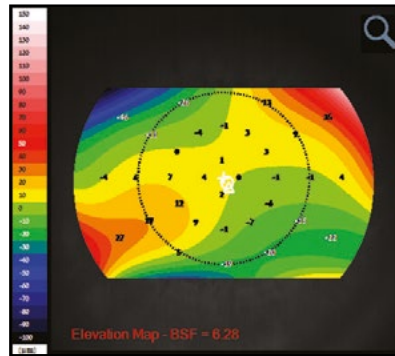
Complete analysis of the cornea

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

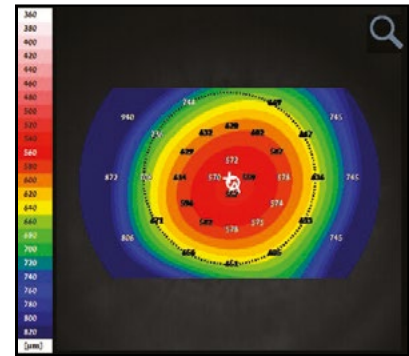
Combination of Scheimpflug imaging and corneal topography technologies used to generate thickness and elevation maps over a large corneal surface.



Axial elevation map



Posterior elevation map



Total refraction elevation map

SCHEIMPFLUG IMAGING

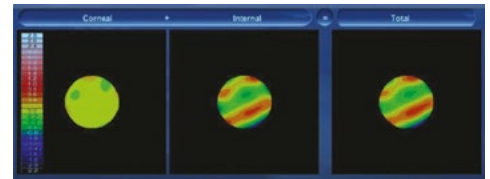
RETRO ILLUMINATION

SHACK-HARTMANN

PLACIDO DISK

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



Analysis of wavefront aberrations

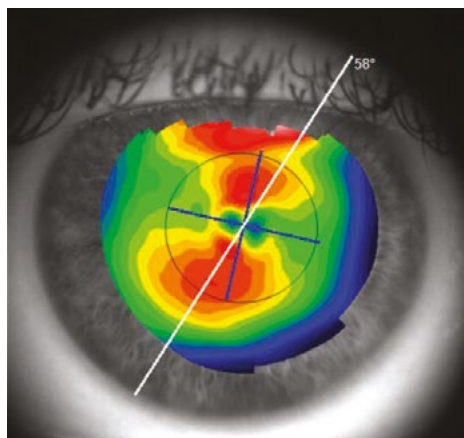


Crystalline opacities LOCS II and III scales



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

SCHEIMPFLUG IMAGING

RETRO ILLUMINATION

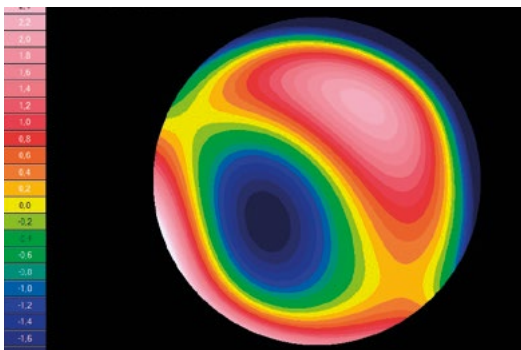
SHACK-HARTMANN

PLACIDO DISK

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



Shack-Hartmann lower-order and higher-order aberrations



Summary screen with day and night vision data



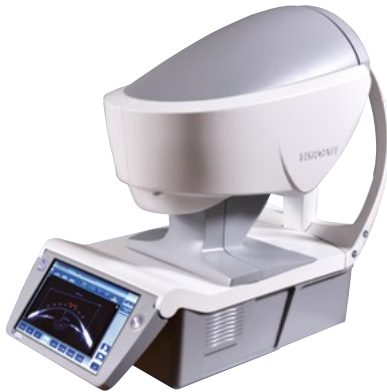
Objective day and night refraction measurements.

SHACK-HARTMANN

VX 130+

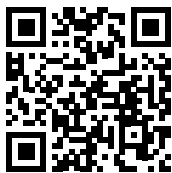
Diagnostic

TECHNICAL SPECIFICATIONS



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

VIDEO



REF.

30200000-03

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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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

VX REFRACTION LINE



VX 24
Chart Display



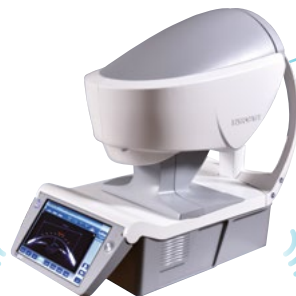
VX BOX II
VSXlink



VX 40
Lensmeter



VX 60
Phoropter



VX 130+
Diagnostic

CUSTOMIZABLE REPORTS



OFFLINE VERSION



OFFICE SOFTWARE

