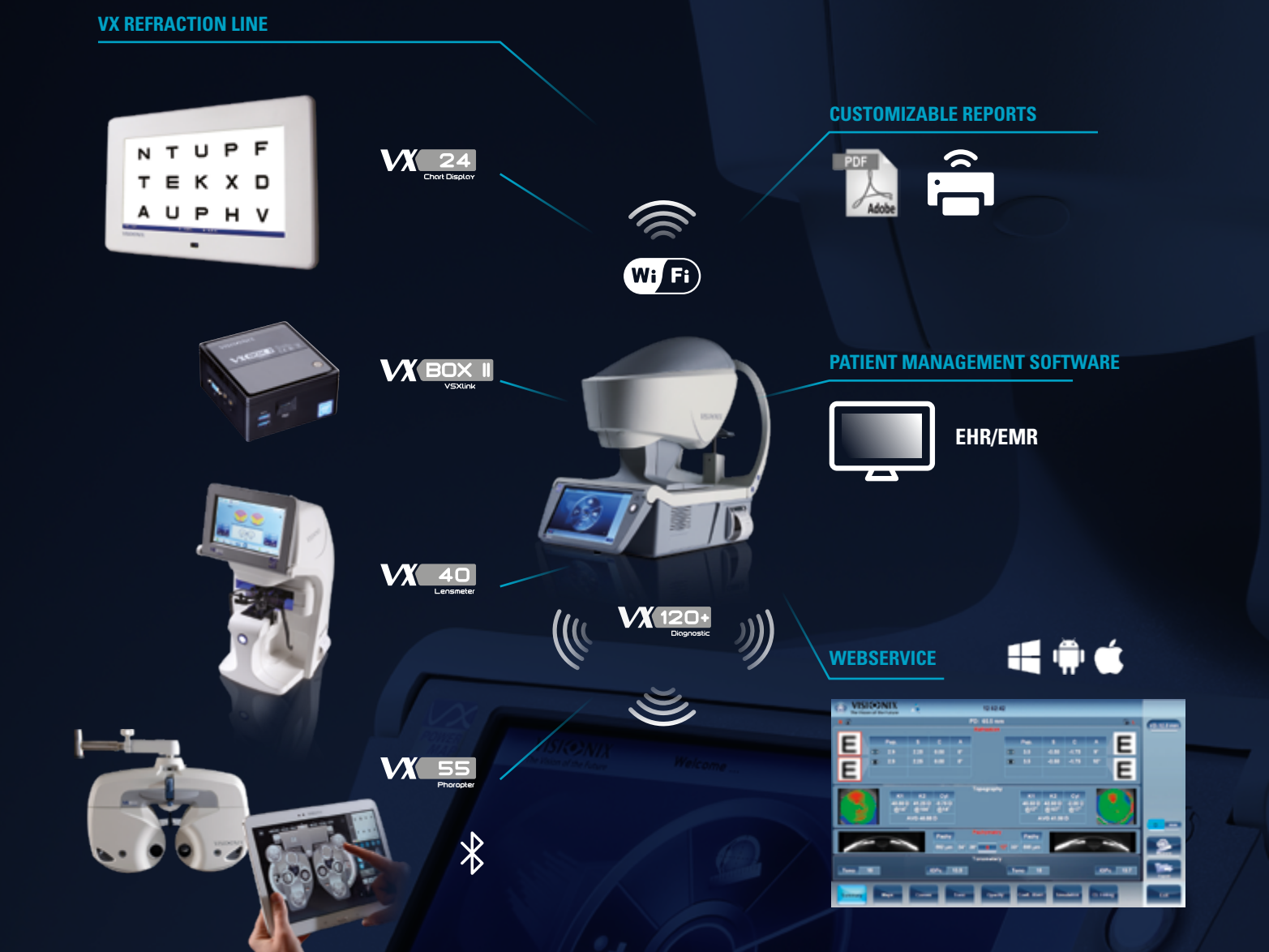
VX 120+
READY FOR COMMUNICATION

The VX 120 + can be set up in a network to integrate with your patient management software and provide a variety of communication options to optimize your work flow.

> Review results from any supported device (tablet, smartphone, etc.)
> Print directly from your local or network printer
> Customize your reports
> Synchronize data, graphs, and maps for any examination
> Communication enabled with other instruments



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

VX 120+ Diagnostic

TABLE OF FEATURES / VERSIONS AVAILABLE

VX 110 Diagnostic	**ARK**	**WF**	**TOPO**		
VX 118 Diagnostic	**ARK**	**WF**	**TOPO**	**ACA***	
VX 220 AC Analyzer		**WF*** **	**TOPO**	**ACA***	**TONO**
VX 120+ Diagnostic	**ARK**	**WF**	**TOPO**	**ACA***	**TONO**
VX 130+ Diagnostic	**ARK**	**WF**	**TOPO**	**ACA****	**TONO**

* ACA : Anterior chamber analisis
** ACA : Total surface analisis
*** WF : corneal abberometry

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

Fully automated

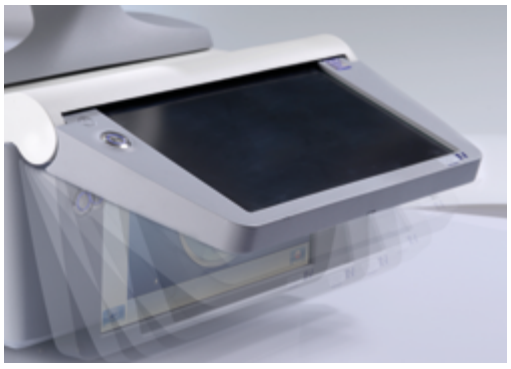
- Fully automatic 3D and R/L eye alignments
- 7 types of automatic simultaneous measurements
- Operator independent measurements
- High reproducibility of measurements

Automatic alignment and measurement which allows

- High reliability for measurements
- Significant time savings
- Optimal comfort based on ergonomic design

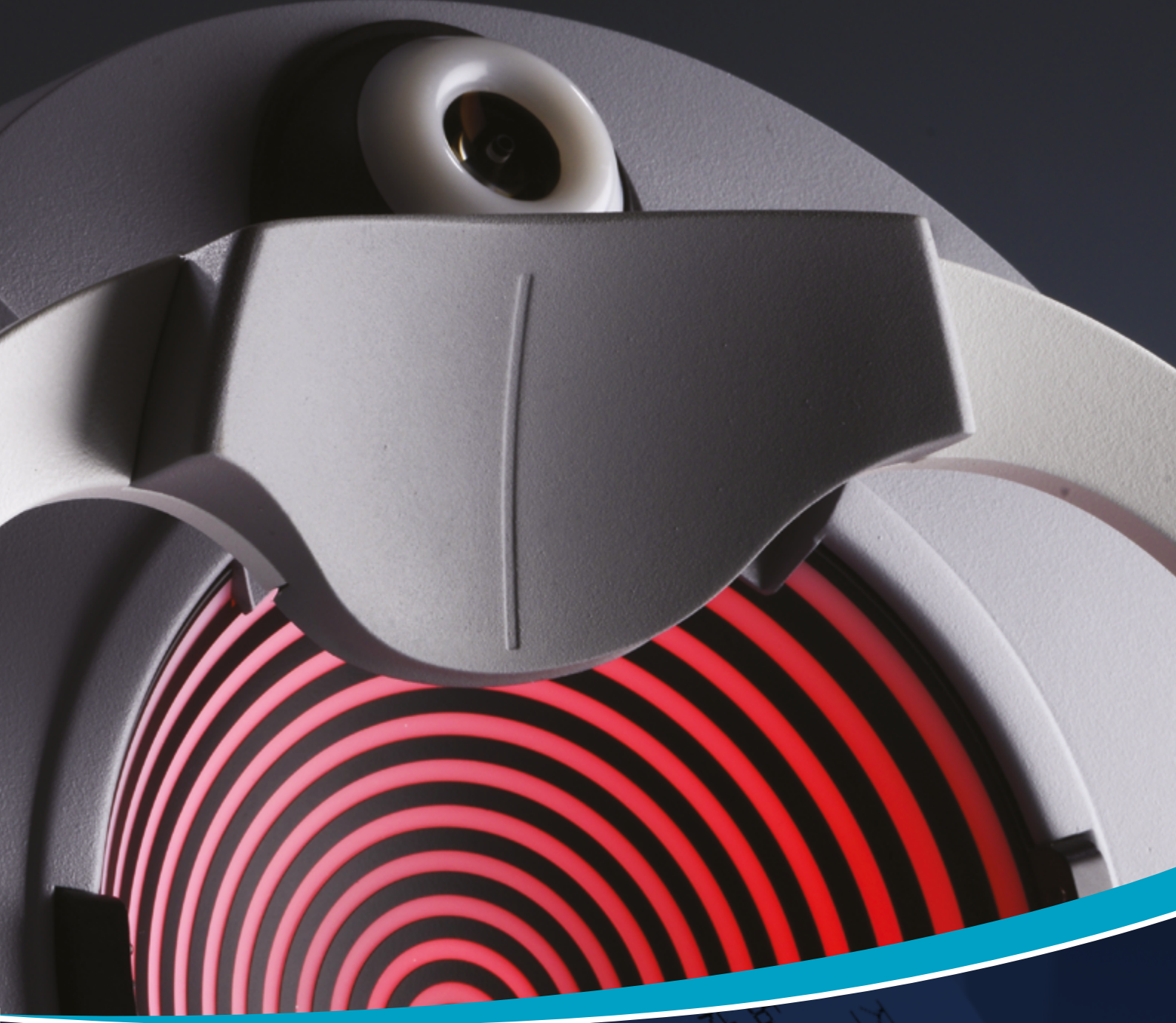
Additional customers benefits

- Quick detection of refraction, higher order aberrations, and warning indications for measurements outside of normal parameters
- Easily transfer patient measurements to the doctor for exam
- A refined and highly accurate refraction due to advanced technology and added features
- Delegation of tasks
- As part of examinations of refraction and detection of high-order aberrations, possible suspicion of pathologies



Specific website
http://www.visionix-vx120.com

Luneau Technology
2 rue Roger Bonnet, 27340 PONT DE L'ARCHE - FRANCE-Tel. + 33 232 989 132 - Fax + 33 235 020 294- **www.visionix.com**



VX 120+
Diagnostic

ONE-TOUCH HIGH-END REFRACTION VISION ANALYSIS, AND DIAGNOSIS OF THE ANTERIOR CHAMBER

VISIONIX
The Vision of the Future

VX120+

UNIQUE DIAGNOSTIC DEVICE FOR THE ANTERIOR CHAMBER, SCREENING AND ANALYSIS OF THE VISION

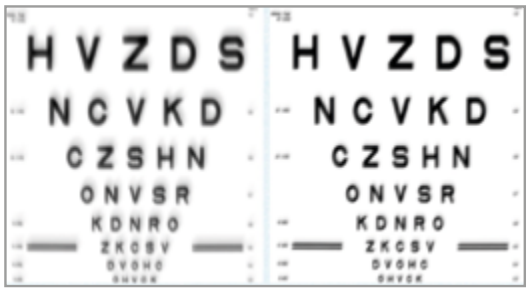
Make the difference thanks to the VX120+, complete and fully automatic diagnostic screening device. Complete refraction, differentiate between day and night vision needs, glaucoma, cataract, keratoconus identification and monitoring , fitting of contact lenses.

COMPLETE REFRACTION
DIFFERENTIATE BETWEEN DAY AND NIGHT VISION NEEDS

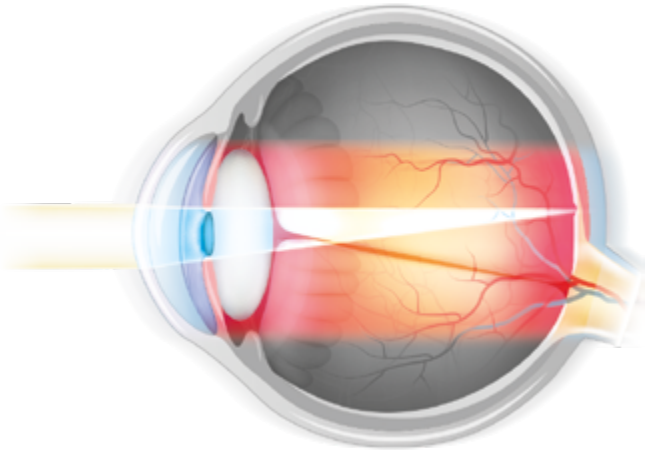
> Objective day and night refraction measurements
> 1300 points points analyzed for a 7-mm diameter pupil
> Objective refraction under mesopic and photopic conditions
> Measures lower-order and higher-order aberrations
> Access visual acuity and quality of vision on a pupil as small as 1.2 mm
> MTF curve

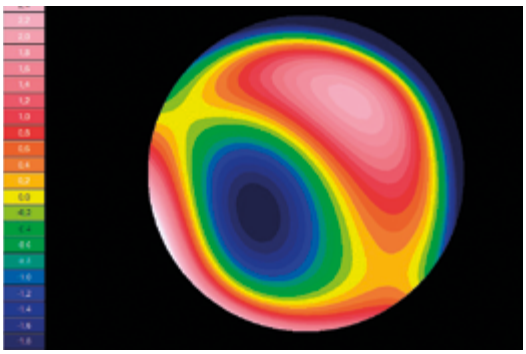
TECHNOLOGY :

Shack-Hartmann wavefront analysis



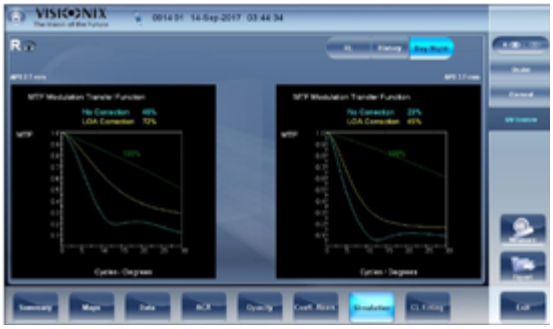
Simulations of visual acuity





Shack-Hartmann wavefront maps measure lower-order and higher-order aberrations

Main screen



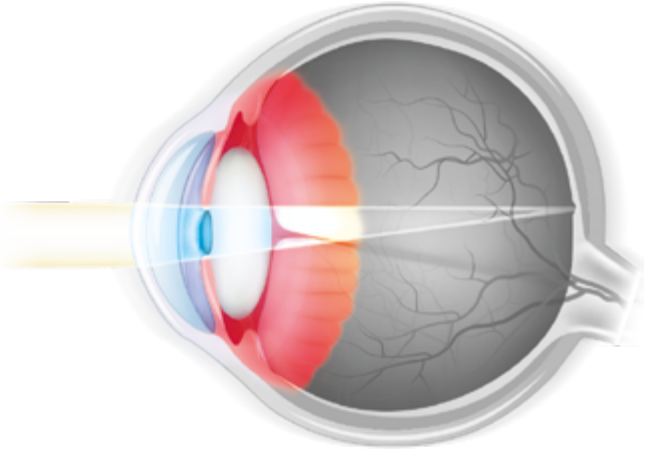
Objective day and night refraction measurements
Analysis of aberrations with Zernike coefficients

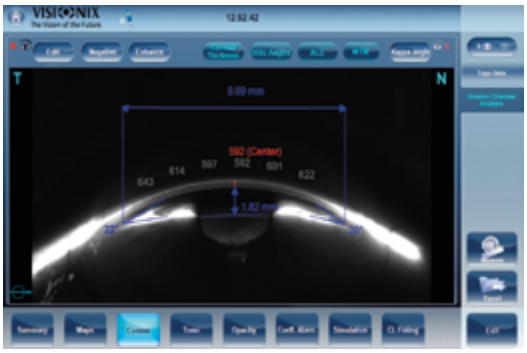
GLAUCOMA
IDENTIFICATION AND MONITORING

> 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

TECHNOLOGY :

Scheimpflug imaging and non contact tonometer with soft air puff.





Anterior chamber analysis

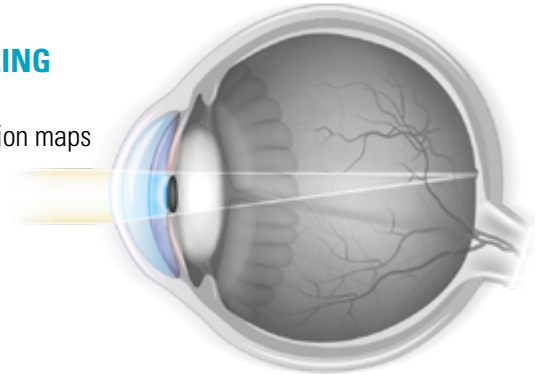
Main screen

Tonometry analysis : Corrected IOP as a function of corneal thickness

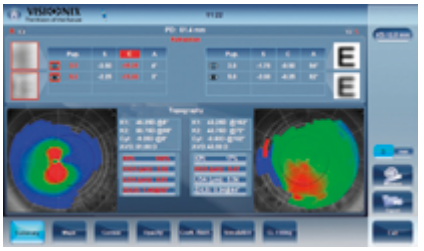
KERATOCONUS
IDENTIFICATION AND MONITORING

Topography maps

> Axial, tangential elevation and refraction maps
> Keratoconus probability index (KPI)
> Keratoconus monitoring
> Internal astigmatism measurement
> Eccentricity and meridian tables
> Corneal aberrometry



Meridian Table



Keratoconus probability

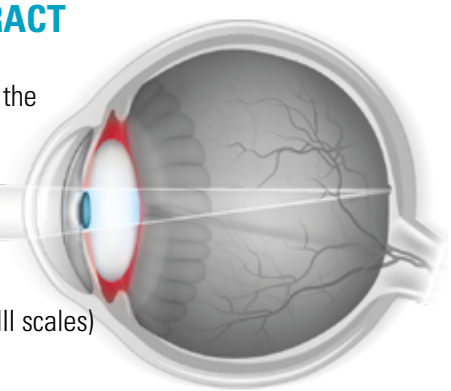
TECHNOLOGY :

Wavefront analysis with Shack-Hartmann technology , Placido rings, Scheimpflug imaging

Main screen

IDENTIFICATION OF A CATARACT

> 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)

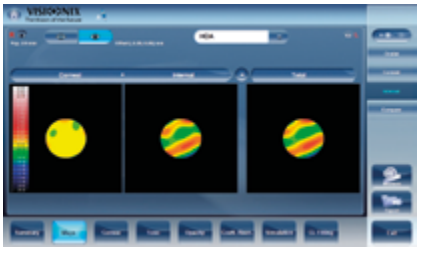


TECHNOLOGY :

Scheimpflug imaging , Retroillumination, Shack-Hartmann, Placido rings

Opacity monitor

Visualization of crystalline opacities and LOCS scales



Analysis of wavefront aberrations, with the separation between corneal and lenticular/internal aberrations

Main screen