

# 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.

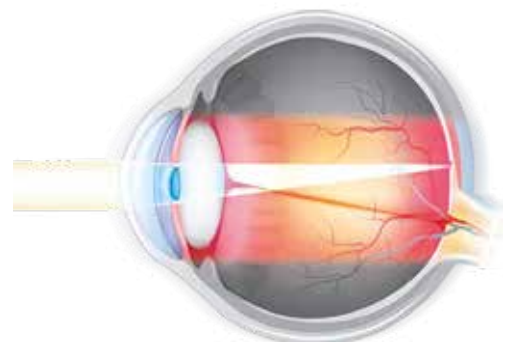


Height	570 mm
Width	312 mm
Depth	530 mm
Weight	25 kg
Voltage	100-240 VAC, 50/60 Hz, 300 W

## Complete Refraction

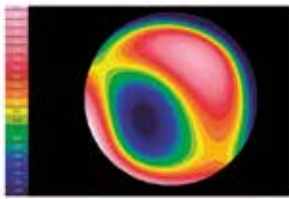
### Differentiate Between Day And Night Vision needs

- 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

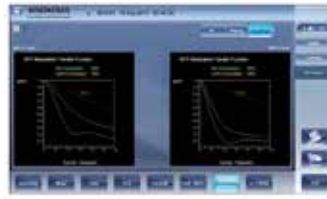


## Technology

Shack-Hartmann wavefront analysis



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



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



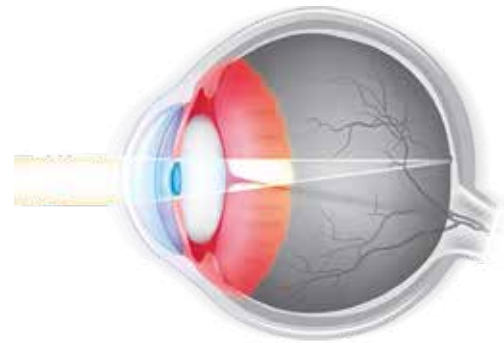
Main screen



**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



Tonometry analysis : Corrected IOP as a function of corneal thickness



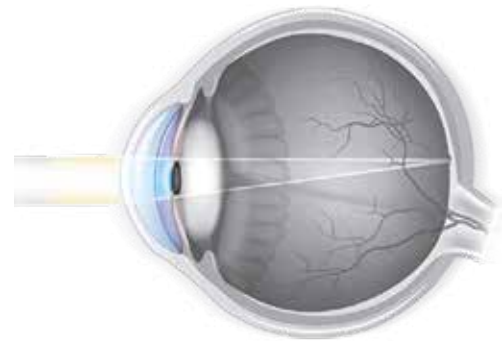
Main screen

**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



**Technology**

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



Meridian Table



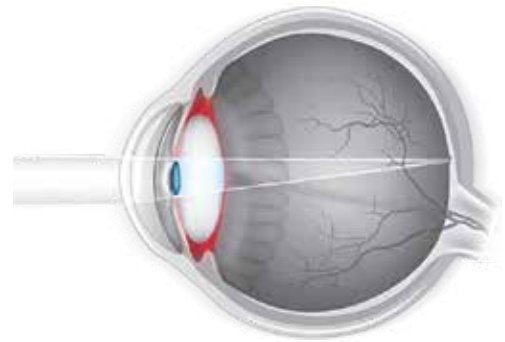
Keratoconus probability



Main screen

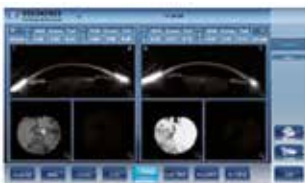
**Identification of a cataract**

- 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)

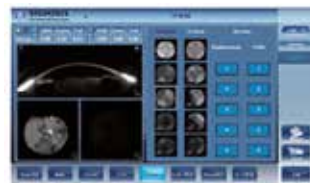


**Technology**

Scheimpflug imaging , Retroillumination, Shack-Hartmann, Placido rings



Opacity monitor



Visualization of crystalline opacities and LOCS scales



Main screen



### VX120+ 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

## 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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