One-Touch High-end Refraction, Vision Analysis, Higher Order Aberrations and Topography
**VX118**

The VX 118 is a unique, complete, and fully automatic refraction and topography device. The VX 118 features variations of refraction, pathologies such as keratoconus, and fitting of contact lenses with integrated topography. Top of the line non-contact pachymetry and analysis of the anterior chamber by the bias of a Scheimpflug camera. With full integration in mind, the VX 118 is designed to be able to export measurements and findings and archive your data using Wi-Fi, USB key, office networks, etc.

### Refraction and Vision Performance

- Extremely precise refraction (cylinder and axis)
- Refraction on small pupils 1.2 / 1.4 mm.
- 1400 points of analysis for a pupil of 7 mm
- Measurement of daytime vision and nighttime vision
- Analysis of low-order and high-order optical aberrations

**Technology:** Analysis of the wavefront with the Shack-Hartmann sensor.

### Corneal Analysis

- Contact lenses and fitting
- Screening keratoconus and corneal pathologies

**Technology:** Analysis of the wavefront using the Shack-Hartmann sensor, Placido disk.
CATARACT

> Screening for loss of contrast and penetration of light
> Effect of the opacity on the quality of vision

TECHNOLOGY: Retro illumination, Scheimpflug camera, Shack-Hartmann matrix.

Opacity monitor
### Technical data

#### General
- **Dimensions**: W 320 mm x D 555 mm x H 540 mm  
  W 12.59 in. x D 21.8 in x H 21.25 in
- **Weight**: 27 kg / 59.5 lbs.
- **Working distance**: 91 mm
- **Alignment**: XYZ automatic
- **Display**: 10.1” (1024 x 600) TFT screen  
  Multi-touch screen
- **Observation area**: ø 14 mm
- **Printer**: Integrated black and white - external color available
- **Voltage**: 100/120, 220/240 V CA, 50/60 Hz, 250 W
- **Medical directive**: CE MDD 93/42/CE modified by directive 2007/47/CE
- **Output**: RS232 / USB / VGA / LAN

#### AR & power mapping (Wavefront)
- **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 areas)
- **Number of measuring points**: 1,500 points
- **Acquisition time**: 0.2 sec
- **Method**: Shack-Hartmann

#### Pachymetry, IC angle and pupillometry
- **Method**: Scheimpflug
- **Pachymetry range**: 150-1300 μm
- **Pachymetry resolution**: +/- 10 microns
- **IC angle range**: 0°-60°
- **IC resolution**: 0.1°
- **Pupil illumination**: Blue light 455 nm

#### Retro illumination

#### Corneal topography
- **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 0.33 mm to more than 10 mm
- **Diopters measured field**: From 1 to 100
- **Repeatability**: 0.02 mm
- **Method**: Placido rings

#### 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