



## 1. OVERVIEW

Myopia Expert 700 is the new solution for myopia control and corneal analysis.

Here below a quick description of the main features:

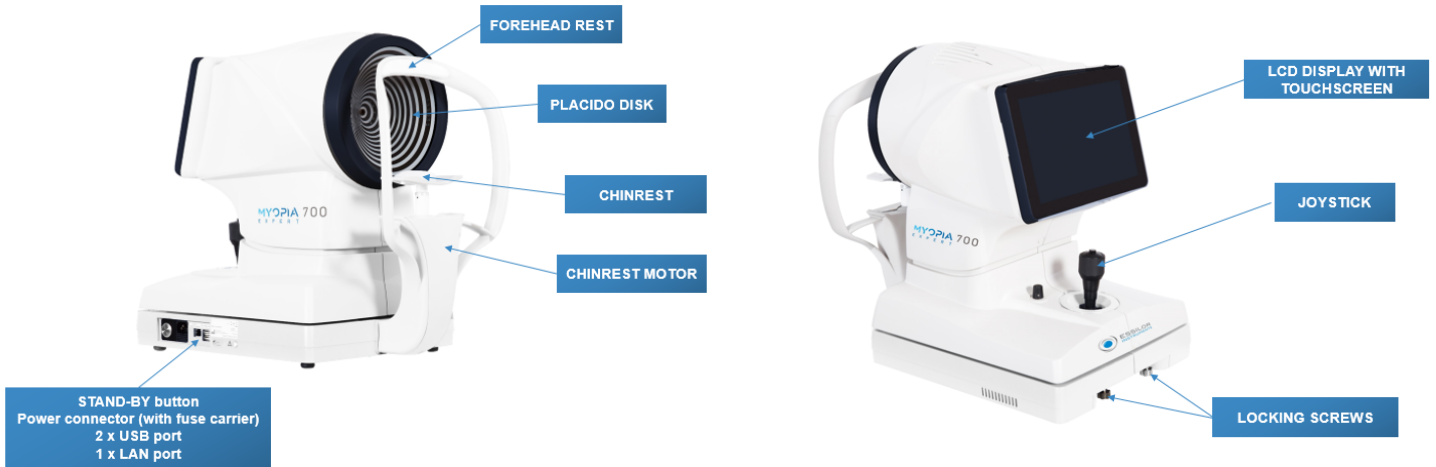
### SOFTWARE FEATURES

AXIAL LENGTH MEASUREMENT	
<b>AL</b>	<b>Axial Length:</b> measurement of the axial length of the eye needed for the control of myopia progression. The measurement is performed with the use of an optical interferometer
KERATOMETRY	
<b>K-READINGS</b>	Accurate measurement of the keratometry from the placido rings
CORNEAL TOPOGRAPHY	
<b>CORNEAL MAP</b>	Acquisition of the topographic map of the eye with the measurement of the main indexes: keratometry, keratorefractive indexes and keratoconus screening. Additional features: height map, 3D map, curvature profiles, comparison between maps and difference map
WHITE TO WHITE	
<b>WTW</b>	Measurement of the corneal diameter: horizontal distance between the borders of the corneal limbus.
PUPILLOMETRY	
<b>DYNAMIC</b>	Measurement of the pupil diameter under dynamic conditions of light: scotopic to photopic to scotopic
<b>PHOTOPIC</b>	Measurement of the pupil diameter under photopic condition of light
<b>MESOPIC</b>	Measurement of the pupil diameter under mesopic condition of light
<b>SCOTOPIC</b>	Measurement of the pupil diameter under scotopic condition of light
CORNEAL WAVEFRONT ANALYSIS	
<b>ZERNIKE</b>	Analysis of the aberrations induced by the anterior surface of the cornea through the Zernike polynomials at different pupil size
CONTACT LENS SOFTWARE	
<b>CONTACT LENS</b>	Software for the contact lens fitting and Ortho-K lens fitting with lens database included
EXTERNAL PC SOFTWARE	
<b>i-MAP</b>	External PC software for reviewing from a remote station

## HARDWARE FEATURES

ALL IN ONE INSTRUMENT	
PC ON BOARD	Integrated PC with complete software and patient database
TOUCH SCREEN	Integrated monitor with capacitive touch screen display
MOTORIZED CHINREST	Integrated motorized chinrest completely managed by the software

## 2. HARDWARE AND SOFTWARE DESIGN



### 3. INTENDED USE

Myopia Expert 700 is a corneal analyzer with integrated pupillographer and optical biometer.

The main applications are the following:

- Corneal topography for diagnostic purposes
- Measurement of Eye Axial thicknesses
- Fluorescence imaging for contact lens fitting
- Pupil measurements
- Store and generate overviews of historic data of ocular properties for easy observation of changes over time. Such especially useful with for example conditions of myopia

### 4. TECHNICAL SPECIFICATIONS

GENERAL INFORMATION		
FUNCTION	FEATURES	
<b>Axial Length</b>	Low Coherence Interferometry	
<b>Corneal topography and Keratometry</b>	Keratoscopic Cone	24 rings equally distributed on a 43D sphere
	Analyzed points	Over 100.000
	Measured points	Over 6.000
	Corneal Coverage	Up to 9.8 mm on a sphere of radius 8mm (42.2 diopters with n = 1.3375)
	Focus System	Guided focus
<b>Pupillometry</b>	Infrared LEDs + White LEDs for photopic pupil acquisition	
<b>Fluoresceine</b>	Blue LEDS with barrier yellow filter	
<b>IBI index (Inter-Blink Interval)</b>	Infrared illumination (LEDs)	
<b>Break-Up Time (TBT)</b>	Non invasive from videokeratoscopy	

INFORMATION ON MEASUREMENTS				
MEASUREMENT		MEASURING RANGE	DISPLAY RESOLUTION	IN VIVO REPEATABILITY
<b>Keratometry</b>	Curve radius	5.00 – 12.00 mm	0.01 mm	±0.02 mm
	Curve Radius in Diopter (D) (n=1.3375)	28.00 - 67.50 D	0.01 D	±0.12 D
<b>Axial Length</b>		16.00 – 34.00 mm	0.01 mm	±0.016 mm
<b>Pupil dimension</b>		1.50 – 10.00 mm	0.01 mm	±0.05 mm

<b>Limbus (White-To-White)</b>	8.00 – 14.00 mm	0.01 mm	±0.05 mm
<b>IBI Index</b>	0.2 – 20.0 s	0.1 s	N/A
<b>Break-Up Time (TBT)</b>	0.5 – 30 s	0.1 s	N/A

ENVIRONMENTAL CONDITIONS						
	IN USE		STORAGE		TRANSPORT	
	Min	Max	Min	Max	Min	Max
<b>Temperature</b>	10° C	40° C	-2 0° C	70° C	-2 0° C	70° C
<b>Relative humidity</b>	8- 75% (non condensing)		8- 75% (non condensing)		8- 75% (non condensing)	
<b>Atmospheric pressure</b>	800- 1060 h Pa		700- 1060 h Pa		700- 1060 h Pa	

ELECTRICAL DATA		
<b>Power supply</b>	AC 100-240V 50/60 Hz	
<b>Power consumption</b>	100 VA	
<b>Fuse</b>	<b>Type</b>	20 x 5 mm
	<b>Value</b>	T 2.5 A L 250 V anti-surge

MECHANICAL SPECIFICATIONS	
<b>Width</b>	320mm
<b>Height</b>	490mm
<b>Length</b>	470mm
<b>Weight</b>	15 kg

ON-BOARD PC SPECIFICATIONS	
<b>Operating system</b>	WINDOWS 10
<b>Processor</b>	Intel® Celeron ® DC N 3350
<b>RAM</b>	4GB
<b>Hard disk</b>	At least 500GB
<b>External connections</b>	LAN integrated, 2x US B