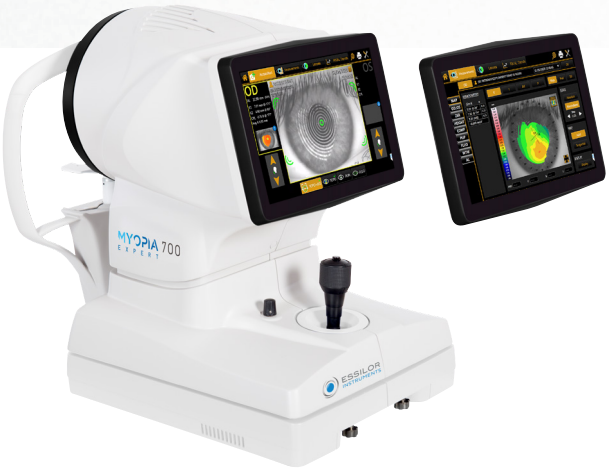
TECHNICAL SPECIFICATIONS

MYOPIA 700
EXPERT

ESSILOR
INSTRUMENTS



The Myopia Expert™ 700 optical biometer provides a fast and accurate solution for measuring axial length and corneal topography. The device provides several important measurements, including axial length, k-readings, corneal topography, white-to-white measurement and pupillometry. Easy-to-use and fully-automated, the Myopia Expert™ 700 integrates seamlessly into your practice and allows you to get an early start on the myopia management conversation with young patients and their parents.

INTENDED USE

The Myopia Expert™ 700 is a corneal analyzer with an integrated pupillographer and optical biometer. Its main applications are as follows:

- Corneal topography for diagnostic purposes
- Measurement of the axial length of the eye
- Fluorescence imaging for contact lens fittings
- Pupil measurements
- Storage and overviews of historic ocular data properties for easy observations of changes over time, which is especially useful for myopia

1. Forehead rest
2. Placido disk
3. Chinrest
4. Chinrest motor

5. Stand-by button
   Power connector (with fuse carrier)
   2 x USB port
   1 x LAN port

6. LCD display with touchscreen
7. Joystick
8. Locking screws

SOFTWARE FEATURES

AXIAL LENGTH MEASUREMENT	
Axial length	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	
K-readings	Accurate measurement of the keratometry from the placido rings
CORNEAL TOPOGRAPHY	
Corneal map	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	
WTW	Measurement of the corneal diameter: horizontal distance between the borders of the corneal limbus
PUPILLOMETRY	
Dynamic	Measurement of the pupil diameter under dynamic conditions of light: scotopic to photopic to scotopic
Photopic	Measurement of the pupil diameter under photopic condition of light
Mesopic	Measurement of the pupil diameter under mesopic condition of light
Scotopic	Measurement of the pupil diameter under scotopic condition of light
CORNEAL WAVEFRONT ANALYSIS	
Zernike	Analysis of the aberrations induced by the anterior surface of the cornea through the Zernike polynomials at different pupil sizes
CONTACT LENS SOFTWARE	
Contact lens	Software for contact lens fittings and Ortho-K lens fittings with the lens database included

HARDWARE FEATURES

ALL-IN-ONE INSTRUMENT	
PC on board	Integrated PC with complete software and patient database
Touch screen	Integrated monitor with capacitive touchscreen display
Motorized chinrest	Integrated motorized chinrest completely managed by the software

TECHNICAL SPECIFICATIONS

MEASUREMENT SPECIFICATIONS		
FUNCTION	FEATURES	
Axial length	Low coherence interferometry	
Corneal topography and keratometry	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
Pupillometry	Infrared LEDs + White LEDs for the photopic pupil acquisition	
Fluoresceine	Blue LEDX with a barrier yellow filter	

MEASUREMENT RANGE AND ACCURACY				
MEASUREMENT		MEASURING RANGE	DISPLAY RESOLUTION	IN VIVO REPEATABILITY
Keratometry	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
Axial length		15.00 – 36.00 mm	0.01 mm	±0.027 mm
Pupil dimension		0.50 – 10.00 mm	0.01 mm	N/A
Limbus (white-to-white)		8.00 – 14.00 mm	0.01 mm	±0.05 mm

ENVIRONMENTAL CONDITIONS						
	IN USE		STORAGE		TRANSPORT	
Temperature	Min 50° F	Max 104° F	Min -4° F	Max 158° F	Min -4° F	Max 158° F
Relative humidity	8 – 75% (non-condensing)		8 – 75% (non-condensing)		8 – 75% (non-condensing)	
Atmospheric pressure	800-1060 h Pa		700-1060 h Pa		700-1060 h Pa	

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

MECHANICAL SPECIFICATIONS	
Width	12.6 in
Height	19.3 in
Length	18.5 in
Weight	40 lbs

PC SPECIFICATIONS	
Operating system	WINDOWS 10
Processor	Intel® Celeron® DC N 3350
RAM	4GB
Hard disk	At least 500GB

CE 0123

This is a medical device MDD class IIa. Legal manufacturer Visia Imaging S.r.l.
For professional use only. Read instructions carefully for use.

ESSILOR INSTRUMENTS

Essilor Instruments USA | 8600 W. Catalpa Avenue, Suite 703 | Chicago, IL 60656 - USA | Phone: 855.393.4647
Email: info@essilorinstrumentsusa.com | www.EssilorInstrumentsUSA.com