

# STELLEST® MYOPIA EXPERT™

From every metric to every milestone.



An optical biometer & corneal topographer with a dedicated digital workflow tool.



**essilor**

evolving  
vision

2.5 billion  
people suffer from  
myopia today.<sup>1</sup>

50% of the  
world's population  
is predicted to be  
myopic by 2050.<sup>1</sup>

The younger  
a child becomes  
myopic the faster  
their myopia can  
progress.<sup>2,3</sup>

Addressing this rising tide requires an accurate  
and easy to use diagnostic solution.



## Introduction

Introducing Stellest Myopia Expert, composed of the Myopia Expert™ 700, combined with Stellest® Myopia Suite™, an intuitive and accurate solution for a comprehensive myopia management journey\*.

The Myopia Expert™ 700, an optical biometer & corneal topographer for accurate† myopia monitoring & fitting of myopia control solutions. Stellest® Myopia Suite™, a digital workflow tool designed to enhance myopia management at your practice.

\*The terms "intuitive," "accurate," and "comprehensive" refer respectively to the usability of the Stellest® Myopia Suite™, the measurement precision of the Myopia Expert™ 700 (ME700), and the integrated myopia management workflow. These descriptors do not imply clinical outcomes or guarantee treatment effectiveness. Product features and availability may vary by region and are subject to local regulatory approvals.

†The Myopia Expert™ 700 is accurate to 27 µm in Axial Length measurement.

1. Holden, B.A., Fricke, T.R., Wilson, D.A., Jong, M., Naidoo, K.S., Sankaridurg, P., Wong, T.Y., Naduvilath, T.J., Resnikoff, S., 2016. Global Prevalence of Myopia and High Myopia and Temporal Trends from 2000 through 2050. Ophthalmology 123, 1036-1042.

2. Wolffsohn JS, et al. IMI-myopia control reports overview and introduction. Investigative ophthalmology & visual science. 2019;60(3):M1-9.

3. Sankaridurg P. A less myopic future: what are the prospects? Clin Exp Optom. 2015;98(6):494-6.

# Collect patient data to detect early myopia onset\*



Identify early myopia risk factors through a comprehensive interview and combine them with all relevant myopia data through our digital solution.



Capture multiple measurements from the Myopia Expert™ 700, and seamlessly transfer axial length data into Essilor® Stellest® Myopia Suite™.

**Corneal topography**  
for a comprehensive examination  
of the anterior corneal surface

**Keratometry**  
for a precise measurement  
of the central corneal radii

**Axial length**  
follow the evolution  
of the axial length



**Simulated contact lens**  
Simulated image with a large  
database for fitting & follow-up

**Pupillometry**  
to determine reaction  
times and size of pupil

**White-to-white measurement**  
for the horizontal corneal  
diameter measured between the  
borders of the corneal limbus

# Interpret and monitor myopia evolution

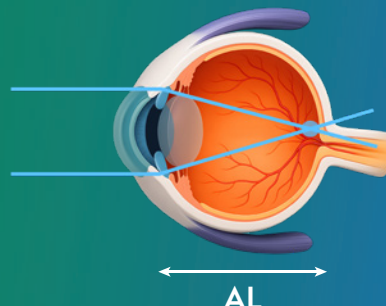
Monitor myopia progression and compare axial elongation with the eye growth data<sup>4</sup> through the dedicated Stellest® Myopia Suite.



The earlier myopia progression is controlled, the less likely it is to become more severe.<sup>5</sup> International Myopia Institute (IMI) recommends a myopia follow-up exam every 6 months.<sup>7</sup>

## Axial Length Measurement

A critical clinical indicator in myopia management.<sup>6</sup>



A 50  $\mu\text{m}$  difference between two follow-up exams indicates some myopia progression.<sup>8,9</sup> 27  $\mu\text{m}$  - the accuracy delivered by the Myopia Expert™ 700<sup>†</sup> - provides the precision you need for effective myopia management.



<sup>†</sup> Visia Imaginix (2021). ANNEX 18.7 Statistical Report. Data on file.

<sup>4</sup> Tideman JW, Polling JR, Vingerling JR, et al. Axial length growth and the risk of developing myopia in European children. *Acta Ophthalmol.* 2018;96(3):301-309. doi:10.1111/aos.13603.

<sup>5</sup> Sankaridurg, P. 2015. A less myopic future: what are the prospects? *Clin Exp Optom.* 98 (6), 494-6.

<sup>6</sup> Jones D, et al. IMI-Instrumentation for Myopia Management. *Investigative Ophthalmology & Visual Science.* 2025 Jul 1;66(9):7-.

<sup>7</sup> Gifford KL, Richdale K, Kang P, Aller TA, Lam CS, Liu YM, Michaud L, Mulder J, Orr JB, Rose KA, Saunders KJ. IMI-clinical management guidelines report. *Investigative ophthalmology & visual science.* 2019 Feb 28;60(3):M184-203.

<sup>8</sup> Wolffsohn JS, Kollbaum PS, Berntsen DA, Atchison DA, Benavente A, Bradley A, et al. IMI - Clinical Myopia Control Trials and Instrumentation Report. *Invest Ophthalmol Vis Sci.* 2019;60(3):M132-M60.

<sup>9</sup> Moore KE, Berntsen DA. Central and peripheral autorefractive repeatability in normal eyes. *Optom Vis Sci.* 2014;91(9):1106-12.



# Promote patient education and ensure long-term follow-up

Educate parents and patients about myopia and myopia management solutions through informative content and visual simulations.

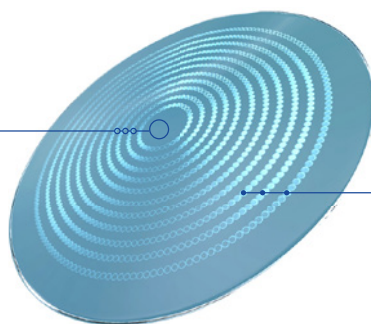
## Myopia correction and control

Take a holistic approach in your Myopia Care. A genius innovation to slow down myopia progression. Essilor Stellest lenses slow down myopia progression by 67% on average.\*<sup>10</sup>



### Correct Myopia

Vision as clear as with single vision lenses<sup>11</sup>



What Essilor® Stellest® Lenses bring to children with myopia.

Control Myopia Progression  
via H.A.L.T. Technology

### No compromises

Aesthetic, simple and safe.<sup>12</sup>  
Comfortable, and easy to adapt for children<sup>11,13</sup>

Encourage parents and children to engage in their treatment and monitoring plan by delivering a personalized Myopia Passport that can:



- Track myopia progression over time and solution effectiveness.
- Compare results alongside eye growth data.<sup>14</sup>
- Show personalized charts to enhance dialogue with patient and parents.
- Provide dedicated prescriptions and recommendations.
- Set follow-up visits.

\*Compared to single vision lenses, when worn 12 hours per day every day for two consecutive years.

Essilor® Stellest® lenses are made from AIRWEAR® polycarbonate which provides impact-resistance and blocks 100% transmission of UV. In terms of visual performance, research has demonstrated the Essilor® Stellest® lens does not impact central and peripheral visual functions.

10. Bao J, et al. Spectacle lenses with aspherical lenslets for myopia control vs single-vision spectacle lenses: a randomized clinical trial. JAMA ophthalmology. 2022;140(5):472-8. doi:10.1001/jamaophthalmol.2022.0401.

11. Bao J, et al. One-year myopia control efficacy of spectacle lenses with aspherical lenslets. British Journal of Ophthalmology. 2022;106(8):1171-6.

12. Gao Y, et al. The impact of spectacle lenses for myopia control on visual functions. Ophthalmic Physiol Opt. 2021;41(6):1320-1331.

13. Drobe B, et al. Adaptation and visual comfort in children with new spectacle lenses containing concentric rings of contiguous aspherical micro-lenses for myopia control. Investigative Ophthalmology & Visual Science. 2020;61(7):94.

14. Tideman JW, Polling JR, Vingerling JR, et al. Axial length growth and the risk of developing myopia in European children. Acta Ophthalmol. 2018;96(3):301-309. doi:10.1111/aos.13603.

# Specifications

## Measurement specifications

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 $n = 1.3375$ )
Pupillometry	Focus system	Guided focus
Pupillometry	Infrared LEDs + White LEDs for photopic pupil acquisition	
Fluorescein	Blue LEDS with barrier yellow filter	

## Measurement range and accuracy

		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 10°C Max 40°C	Min -20°C Max 70°C	Min -20°C Max 70°C
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 2.5A H 250 V anti-surge

## Mechanical specifications

Width	320 mm
Height	490 mm
Length	470 mm
Weight	18 kg

## PC specifications

Operating system	WINDOWS embedded
Processor	Intel®
RAM	At least 4 GB
Hard disk	At least 500 GB
External connections	LAN integrated, 2x USB

**CE**<sub>0123</sub> **Rx** only - For prescription only

Stelltest\_Myopia\_Expert-Brochure-EN-V1-Jan2026

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Myopia Expert 700 is a medical device MDR class IIa.  
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