



# LENSTAR MYOPIA

Your companion for myopia management

Look closer. See further.

## LENSTAR MYOPIA

# State-of-the-art myopia management & patient education

Lenstar Myopia combines the simple and precise measurements of our well-established Lenstar 900 biometer and the sophisticated yet easy-to-use EyeSuite Myopia software for comprehensive myopia management.

Integrated exclusively into EyeSuite Myopia is the AMMC® (Age-Matched Myopia Control) framework by Prof. Dr. Hakan Kaymak, which provides excellent data on the eye's expected length growth considering age, gender, sociocultural factors, genetic prerequisites, and various forms of treatment. A particular emphasis is placed on the easy-to-understand visualization of the current status of myopia but, more importantly, myopia's progression.



## Myopia management from leading experts

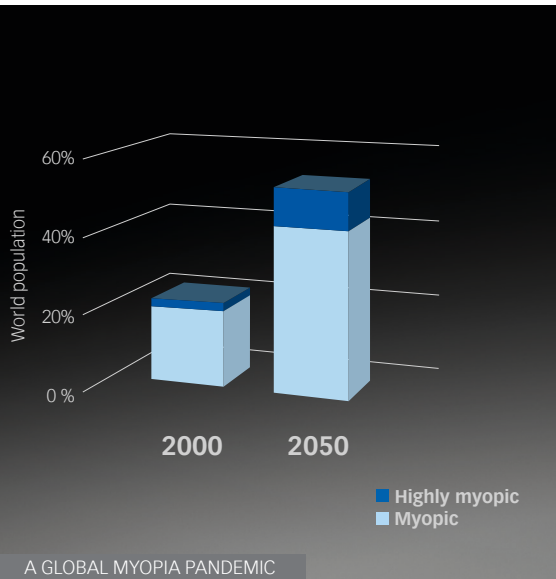
The close collaboration between Haag-Streit and recognized experts and scientists from the field have formed the cornerstone for EyeSuite Myopia and its continuous improvement and further development since its launch in 2020.

EyeSuite Myopia was developed in collaboration with leading myopia experts such as Dr. Thomas Aller and Pascal Blaser of «myopia.care™». And now, through collaboration with Prof. Dr. Hakan Kaymak and using his AMMC® framework, Lenstar Myopia makes a big step forward and further improved the accuracy of the predictions and visualization.

## Adopts Lenstar 900's proven technology

Lenstar Myopia adopts the Lenstar 900's proven Automated Positioning System (APS) technology. Simple and fast measurements at a single click of the joystick saves time and increases patient and user comfort, and is especially beneficial when measuring children's eyes.

This feature is combined with Lenstar's superior measurement technology, which provides a wealth of data to enable accurate predictions about the onset and progression of myopia. This includes precise axial length measurement, pupillometry, vitreous chamber depth, central corneal thickness, and keratometry.



A GLOBAL MYOPIA PANDEMIC

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## Myopia – a growing challenge

The global myopia pandemic continues to progress rapidly. According to the 'Report of the Joint World Health Organization–Brien Holden Vision Institute Global Scientific Meeting' it is predicted to affect around 50% of the world's population by 2050\*. One in ten myopic people will likely develop high myopia, which, if left untreated, can have drastic consequences in adulthood.

It is essential that the gradual development of myopia in children and adolescents can be detected as early as possible. Thus, appropriate treatment can be selected and started immediately to prevent severe progression and high myopia.

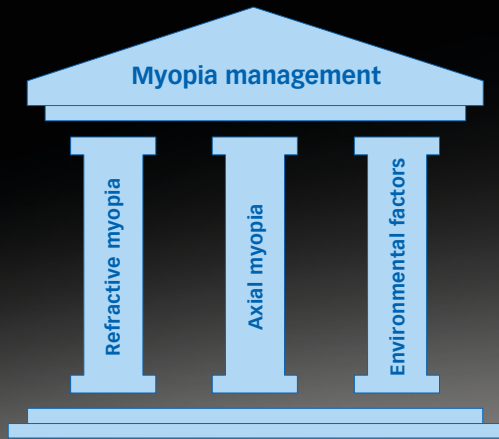
\* [https://myopiainstitute.org/wp-content/uploads/2020/10/Myopia\\_report\\_020517.pdf](https://myopiainstitute.org/wp-content/uploads/2020/10/Myopia_report_020517.pdf)

MYOPIA MANAGEMENT

## The three main influencing factors

Myopia, and therefore myopia management, is influenced by three main factors: Refractive myopia (nearsightedness caused by incorrect refraction of the lens system), axial myopia (nearsightedness caused by the increased length of the eye), and environmental factors (life circumstances that negatively impact eye length).

Of course, Lenstar Myopia considers all three factors and focuses on axial myopia, which is considered the leading method in myopia management today.



MYOPIA MANAGEMENT

SIMPLIFIED VISUALIZATION

## Highly flexible & customizable report

EyeSuite Myopia combines all collected data in a highly flexible and customizable report based on «myopia.care™». The report helps to identify myopia in children quickly and provides the eye care professional with a tool to assess the child's health, decide on a form of treatment, monitor the progress of the chosen treatment, and to adjust or optimize the treatment regimen if necessary.

The report also provides parents with easily understandable information in familiar traffic light colors, enabling them to actively participate in the myopia management process and commit to and support the appropriate treatment for their child.



SIMPLIFIED VISUALIZATION

A NEW FRAMEWORK

## AMMC® by Kaymak

By integrating the AMMC® framework from Prof. Dr. Hakan Kaymak into Lenstar Myopia, it is now possible to compare the speed of eye growth to a broad demographic database. Pathologically fast eye growth can be rapidly identified using an easy-to-understand traffic light system.

Lenstar 900 is proven to provide highly precise axial length measurements. Based on this, AMMC® makes it possible to detect even the smallest changes in axial length and growth speed more reliably.



A NEW FRAMEWORK

TRUSTING RELATIONSHIPS

## State-of-the-art myopia management

The dramatic increase in the number of myopic individuals and the resulting impairments and needs will impact a wide variety of professions, from ophthalmologists and optometrists to opticians.

Expand your practice with state-of-the-art myopia management today and meet the demands of your patients tomorrow with Haag-Streit's Lenstar Myopia. Build trusting and long-lasting relationships and provide patients and their parents with all relevant information about myopia, the effects of myopia, and how they can contribute to myopia management.



TRUSTING RELATIONSHIPS

THE COMPREHENSIVE SOLUTION

## Visualize, manage & educate

With the current increase of myopia cases worldwide, detection, education and management of myopia are in high demand. Lenstar Myopia is the perfect solution; it enables you to:

- Obtain simple and fast measurements and quickly interpret myopia data
- Utilize a wealth of data to predict myopia's onset and progression confidently
- Clearly communicate easy-to-understand information to facilitate true patient/parent education, allowing them to participate in the myopia management process actively
- Identify and control myopia progression and aim for emmetropic eye growth.



THE COMPREHENSIVE SOLUTION

# Connectivity is key

## Seamless integration for optimal workflow

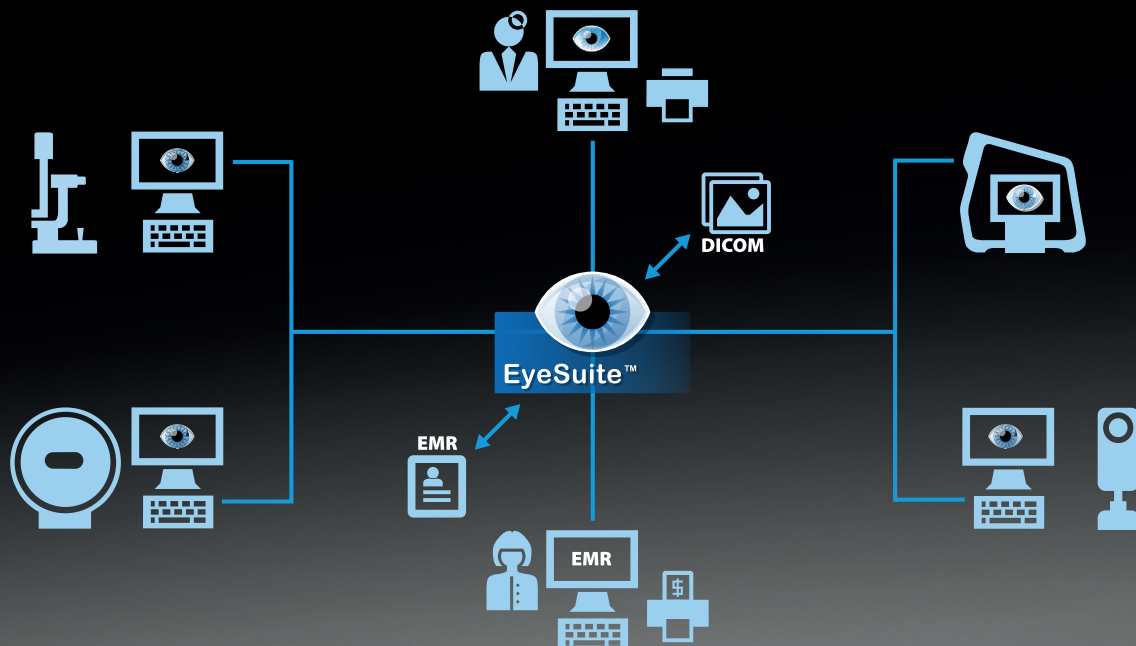
EyeSuite software is designed for efficient patient flow in busy practices. Paired with Lenstar 900's one scan – get all measurements technology and the Automated Positioning System (APS) biometry acquisition is fast.

Sophisticated capture and analysis algorithms – as well as the possibility to review raw data of every parameter in detail to ensure correct measurement – result in full transparency and confidence that the biometry is accurate and precise.

With EyeSuite software, Lenstar 900 is fully networkable and allows full real-time access to all data in a practice.

Furthermore, the EyeSuite script language or standardized interfaces, such as GDT or DICOM, connect easily to almost any electronic medical record system (EMR).

EyeSuite's open data interface, combined with Lenstar 900's separate computer, allows auto-population of the data fields of refractive data from refraction measurement devices or your EMR. This not only saves valuable staff time, it also eliminates the risk of transcription errors.



# Technical specifications

## Lenstar 900

### Measured variables & modes

#### Axial length <sup>AL</sup>

Measurement range	14–32 mm
Display resolution	0.01 mm

#### Vitreous chamber depth <sup>VCD</sup>

Measurement range	1–30 mm
Display resolution	0.01 mm

#### Corneal thickness <sup>CT</sup>

Measurement range	300–800 $\mu$ m
Display resolution	1 $\mu$ m

#### Keratometry <sup>K</sup>

Measurement range	
for radius	5–10.5 mm
Display resolution	0.01 mm
Measurement range	0–180°
for axis angle	
Display resolution	1°

#### Pupillometry <sup>PD</sup>

Measurement range	2–13 mm
Display resolution	0.01 mm

#### Laser safety

Class 1 laser product

#### Electronic medical record system interfaces

- DICOM (SCU)
- EyeSuite Script Language
- GDT
- EyeSuite command line interface

The measurement ranges above are based on the device's standard settings for automatic measurement and analysis.

# Technical specifications

## EyeSuite Myopia

### Features

#### Refraction

Visualization of individual refractive progression trends to support predictions about the outcomes of different treatment methods and compare them to the untreated course of myopia. Overlay the patient's refractive progression with predictions calculated from literature based control rates, which can be adapted and supplemented by new control rates as they become available.

#### Biometry

Visualization of individual axial length progression trends to support myopia progression analyses by overlaying axial length growth curves of peer reviewed population-based studies.

#### Environmental Factors

Visualization of customizable factors, such as myopic parents and time spent outside and their potential effects in myopia progression.

#### Myopia Report

Highly flexible and customizable reports of all available data and visual curves in line with the well-known «myopia.care™» report while providing a basis for in-depth education and counselling of patients and parents.



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