



 **NIMO**^{EVO}



HIGHEST PRECISION & SPEED IN CONTACT LENS METROLOGY

Fast and reliable measurement results with unmatched R&r, enhancing your competitiveness.

LAMBDA-X
OPHTHALMICS

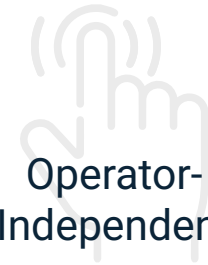
KEY BENEFITS

High Precision Metrology for All Contact Lens Designs



Comprehensive Testing

Precise measurements for power, cylinder, axis, and diameter, detailed maps & wavefront data in one click.



Operator-Independent

Designed for ease of use, no lens alignment needed, enabling non-experts to achieve high throughput of reliable measurements.



Detailed Measurement & Analysis

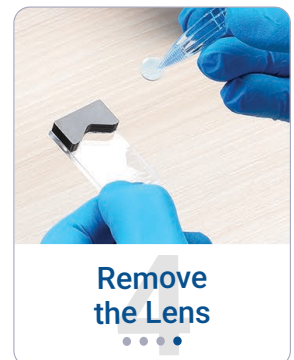
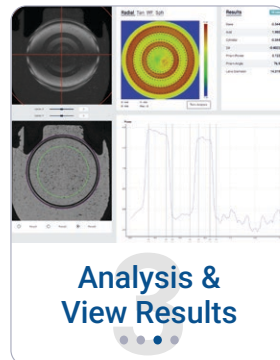
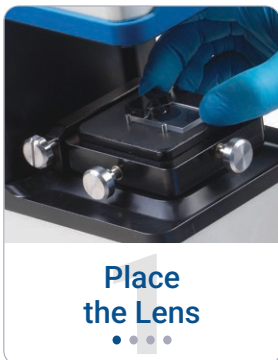
Provides high-resolution mapping and analysis for multifocal, toric, and aspheric lenses, supporting quality control and R&D.



Reduced Inspection Cost

Enhances production efficiency and yield by providing unmatched gage R&r, ensuring reliable and consistent results.

EASE OF USE



Operator-Independent to Achieve Unmatched R&r!

NIMO^{EVO}

The NIMOevo is a cutting-edge metrology instrument that uses advanced wavefront measurement to deliver precise characterization of contact lenses, including multifocal, toric, Ortho-K, and even scleral. Designed for both soft and hard contact lenses, as well as dry and wet measurement, it ensures accuracy and versatility across a wide range of lens types.

Paired with the CLE-Mentor software, offering high-resolution power mapping, precise dimensional measurement, and seamless API integration, the NIMOevo fits R&D and production labs, ensuring fast, reliable, and consistent results with minimal operator intervention.

HIGH ACCURACY

Every lens design is measured with precision, capturing even the finest details.

UNRIVALED R&r

Consistent repeatability and reproducibility for reliable production quality.

SPEED

Takes just 1 second for rapid and efficient testing, streamlining the process and boosting productivity.



MEASURES ALL CONTACT LENSES

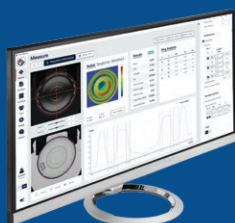
Measures various rigid and soft lens types, including complex designs like multifocal, toric, Ortho-K, and scleral lenses.

LENS DETECTION

Automatically detects the lens edge, centers the field of view, and enables easy operation with rapid measurements.

WET & DRY CELL

Supports versatile testing environments for both wet and dry contact lenses.



CLE-MENTOR

Powerful software for streamlined data analysis, supporting both R&D and production needs.

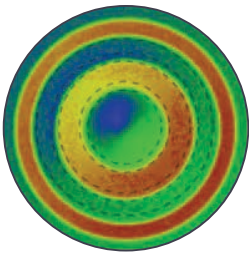


COMPREHENSIVE TESTING

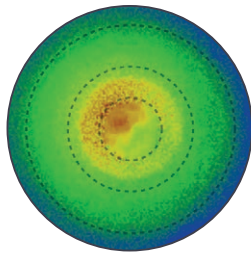
For All Types Of Contact Lenses

With high-resolution wavefront technology and support for both wet and dry cell measurement, it provides accurate assessment of complex designs, supporting the development and quality control of lenses with the highest standards of optical performance.

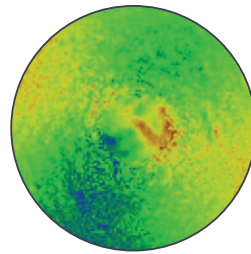
Examples of Contact Lenses Measured with NIMOevo



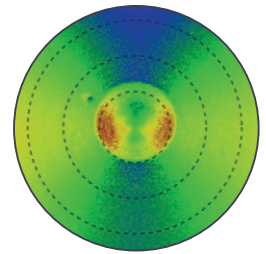
RING SHAPE
MULTIFOCAL



BIFOCAL

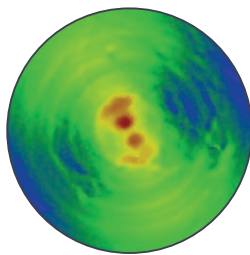


TORIC

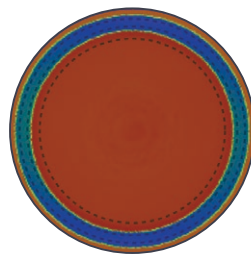


TORIC
BIFOCAL

Soft Contact Lenses



RGP SCLERAL
TORIC



ORTHO-K

Hard Contact Lenses

Did you know?

The NIMOevo's operator-independent design ensures consistent repeatability, **boosting production yield by 5–10% and improving efficiency.**



POWER

Industry-Leading Power Mapping on 1mm²

The NIMOevo ensures precise assessment of the optical power of contact lenses, including multifocal and toric designs. Utilizing high-resolution wavefront technology, it provides detailed power maps and profiles, delivering essential data for quality control and R&D.

High Resolution Power Mapping

Ring Analysis Example

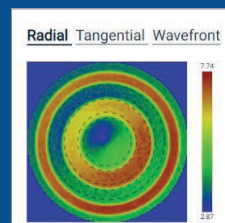
Six Rings Capability: Analyze power distribution across multiple zones.

Customizable Diameters: Tailor ring sizes to specific lens designs.

Base/Add Power: Calculate base and addition power efficiently.

Detailed Metrics: Access spherical and cylindrical values per ring.

Adjustable Zones: Refine ring placement and dimensions manually.



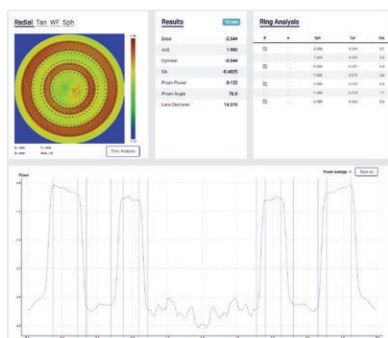
Ring Analysis				
B	A	Sph	Cyl	Dia.
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4.071	-0.085	1.8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5.612	-0.108	2.2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6.718	-0.073	3.2
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5.227	-0.076	3.6
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.898	-0.064	4.3

The power map shows detailed power distribution across the contact lens. With 625 wavefront points per mm², the NIMOevo ensures precise structure analysis.



Precision Power Analysis

Generates precise power maps, capturing detailed information on sphere, cylinder, axis, and additional parameters, ensuring optimal lens characterization.



Radial & Tangential Power Analysis/Maps

Measures power distribution with high spatial resolution, visualizing power variations across different zones of the lens for an in-depth assessment.

Power & Zone Mapping

Measures power distribution in selected areas, providing precise zone analysis for complex lens designs.

Comprehensive Data Reporting

Provides detailed reporting, and raw data exports, ensuring thorough documentation and analysis.

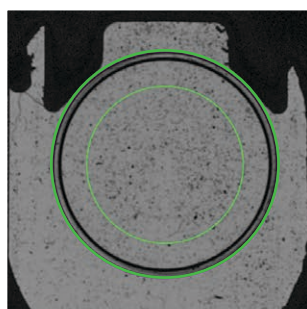
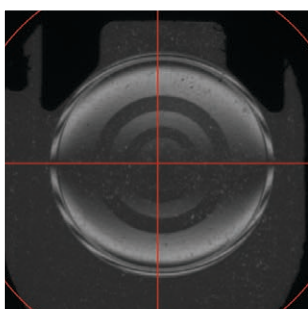
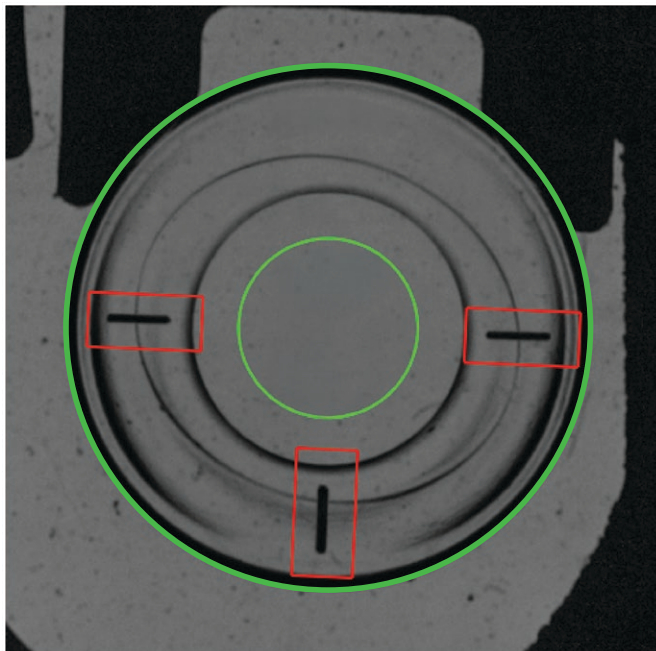
Best-in-Class R&R

Ensures each contact lens is measured with exceptional repeatability, reducing variability and boosting production yield.

DIAMETER

Precise Dimensional Analysis

The NIMOevo performs detailed diameter analysis of contact lenses. The system automatically detects lens diameter and optical center, providing essential data for quality assurance in both development and production environments.



Automatic Lens Recognition

Automatically detects the lens diameter and geometrical center for precise alignment and efficient quality control.

Toric Lens Orientation

Allows users to select or detect toric marks, defining the lens orientation in the patient's eye. The TLMD feature automates this process for enhanced efficiency and accuracy.

Versatile Measurement Capability

Measures both geometric and optical centers, providing a comprehensive analysis of lens dimensions for consistent performance.

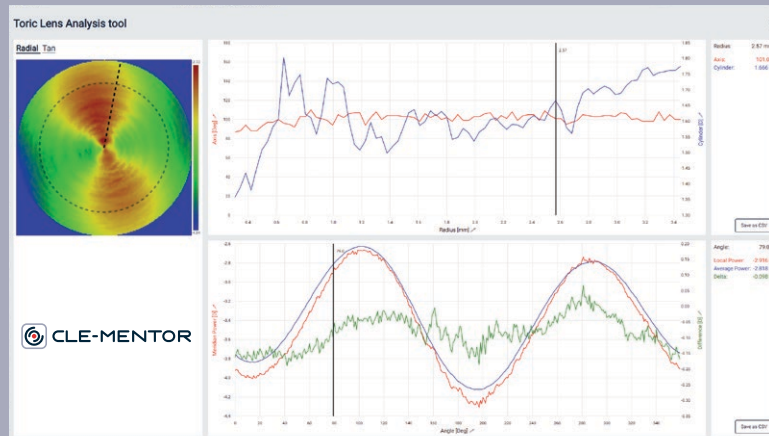
Customizable Measurement Options

Configurable points to analyze unique patterns like concentric rings and dot arrays, available upon request.

COMPREHENSIVE REPORTING

Insights for Contact Lens Quality

The NIMOevo delivers detailed reports tailored for contact lenses, providing high-resolution data for power distribution, diameter analysis, and optical quality, ensuring consistency across all lens designs.



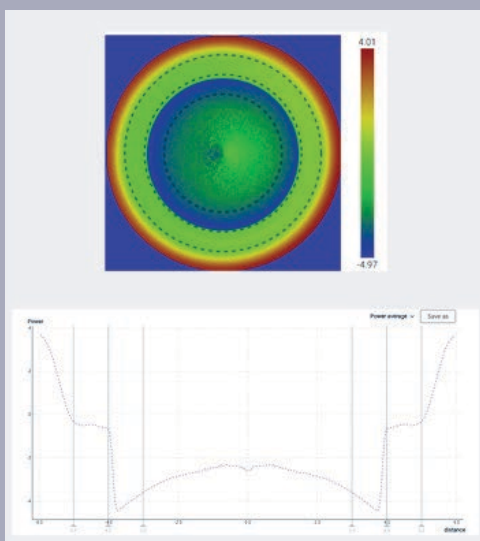
Detailed lens analysis with radial and tangential power profiles, ensuring accurate reporting for cylinder, axis, and local power variations.

Integrated Reporting

Includes detailed graphs, charts, and summaries for easy interpretation.

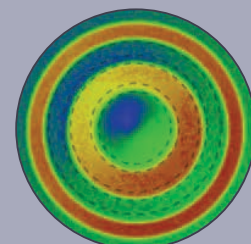
Raw Data Export

Comprehensive data export for extended analysis and informed decision-making.



Quality Assurance

Ensures all measurement data is systematically recorded and easily accessible.



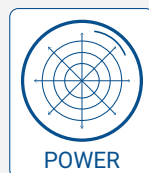
3-in-1 Metrology with NIMOEvo SAG

Sag, Power & Diameter Measurement In One Device

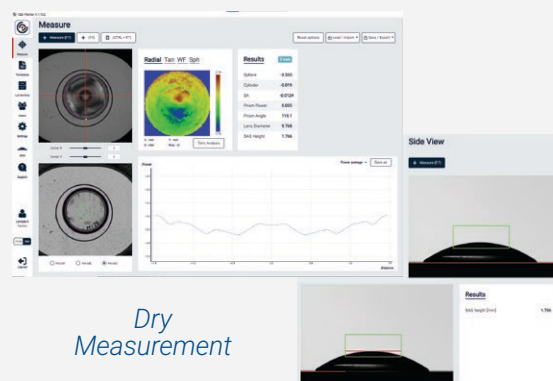
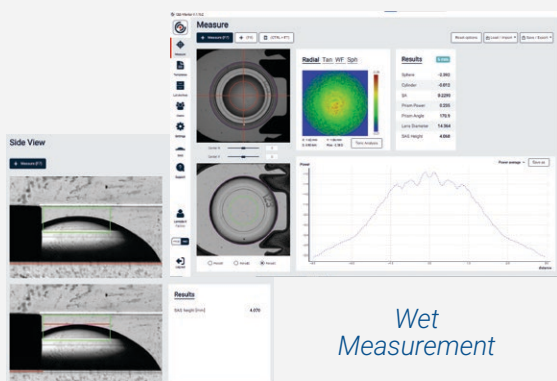
The NIMOEvo SAG builds on the trusted NIMOEvo platform, adding sagittal height (SAG) measurement to its precise power and diameter capabilities. It ensures ISO compliance and streamlines workflows for contact lens production.



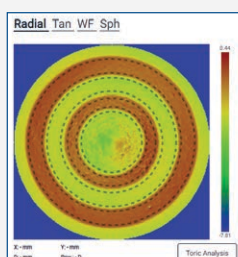
3in1



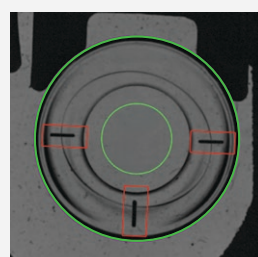
Sagittal Height (SAG) Measurement



Power Measurement



Diameter Measurement



SOFTWARE PLUG-INS

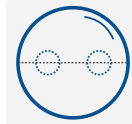
Additional Analysis Capabilities

The CLE-Mentor software is designed to be flexible and extendable, offering a variety of plug-ins to enhance its functionality and tailor it to specific needs.



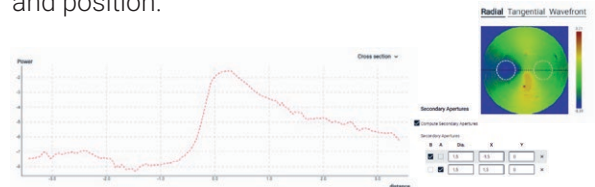
Automatic Toric Lens Marks Detection

Automates the detection of engravings on toric contact lenses, ensuring precise axis computation while minimizing human error.



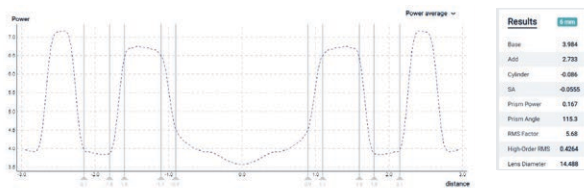
Secondary Apertures

Enables precise measurement of multiple areas on the same lens, independently adjustable in size and position.



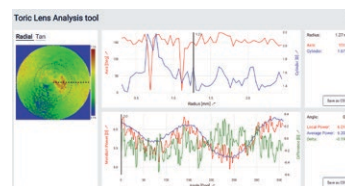
Polynomial Correction

Enhances lens analysis by enabling adjustments to computed power values with high precision.




Extended Toric Analysis

It offers advanced inspection capabilities for power maps, providing detailed insights into toric lenses and other lens types.



Integration with Management Systems

CLE-Mentor offers an API that directly connects with proprietary shop floor management systems.



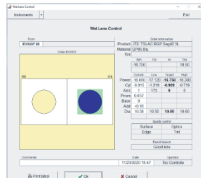
Active Directory Integration

Registered Windows users can log in with their existing credentials, enhancing both security and ease of use.




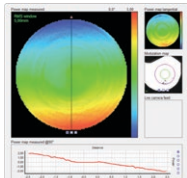
Integration with Software Ecosystems

The API available integrates with third-party software platforms like FocalPoints, and others.



WORKS WITH





ACCESSORIES



Wet Cells (cuvettes) for Soft CL
For precise measurements of soft contact lenses, available in standard & large configurations.



Dry Cells for RGP/Ortho-K
For Rigid Gas Permeable and Ortho-K lens measurements with accurate dry environment testing.



T° controlled + Chiller
Maintains optimal temperature stability for accurate and consistent measurements.



Certified Calibration Lenses
Provides traceable accuracy for reliable system calibration.



DIAMETER STANDARDS
Ensures precise diameter measurements with standardized reference tools.



Fanless PC
RAID HD redundancy and robust system integration ensure efficient and uninterrupted operations.

AUTOMATION-READY

Ensuring Seamless Integration for Automated Systems

The C-NIMOEvo delivers advanced metrology for automated workflows, combining the precision of NIMOEvo with a compact, integration-ready design that enhances productivity, making it perfect for OEM automation systems.

Why Choose C-NIMOEvo for Automation?

- OEM Integration
- NIMOEvo performance & features
- System Connectivity
- Integrated CLE-Mentor Software



TECHNICAL SPECIFICATIONS

Key Metrics and Capabilities



High Precision Wavefront Metrology For Contact Lenses

Measurement principle	Phase shifting Schlieren in transmission
Lens compatibility	Suitable for RGP and soft contact lenses, including spherical, multifocal, aspheric toric, multifocal toric, and Ortho-K lenses
Field of view diameter	Up to 16mm
Wavelength	546 nm
Power repeatability variance	0.01 D (ISO 5725)
Dynamic power range on 6 mm Ø	-35.00 to +35.00 D
Dynamic power range on 15 mm Ø	-15.00 to +15.00 D
Power accuracy	0.5% of nominal power with a minimum of 0.02D for optical power on 3mm
Diameter accuracy	0.2% of nominal diameter, 0.3% for diameter < 10mm
SAG accuracy*	+/-5µm R&r
Operator independence	Measurement results independent from operators
Resolution	20µ per pixel (40µ with binning)
Wavefront analysis	Detailed power maps with Zernike analysis
Power maps	Detailed power maps with camera resolution
Calibration	One-time calibration
Input power	115-230 V, 50-60 Hz
Dimension (H x W x D)	445mm x 135mm x 180mm
Weight	7kg

*Applies exclusively to the NIMOevo SAG model

All the NIMOevo variants comes with CLE-Mentor software, necessary accessories, and documentation to get started immediately.



Measures power and diameter for OEM automation integration

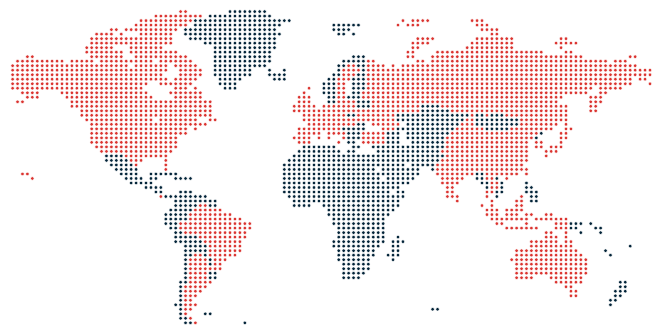


Measures SAG, Power and Diameter



GLOBAL REACH, LEADING INNOVATION

Lambda-X Ophthalmics specializes in the development and manufacturing of advanced optical measurement systems. Based in Belgium, our state-of-the-art technology serves a diverse range of industries worldwide, enhancing quality control and production efficiency. Our commitment to innovation is backed by a rigorous R&D process, ensuring that each instrument, meets the highest standards of accuracy and reliability.



• +50 countries with at least one Lambda-X Ophthalmics instrument

LAMBDA-X
OPHTHALMICS

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