

The image features a NIDEK Magellan Mapper MM1 corneal topographer. The device is white with a large, rectangular frame around the eye. A red, circular sensor is visible in the center. The background is a yellow and orange geometric pattern. The text "NIDEK Magellan Mapper MM1" is prominently displayed in the center.

# **NIDEK Magellan Mapper MM1**

**NIDEK's Magellan Mapper™ is the world first corneal topographer with expanded screening for eight different corneal disorders**

**One Step Beyond Ahead the Market Standard**



**NIDEK TECHNOLOGIES**

VISIONARY PERFORMANCE



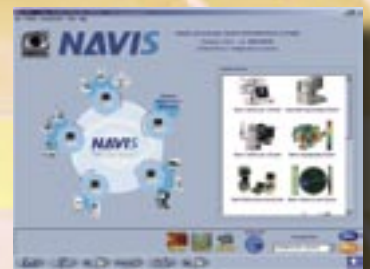
Low light level cone



21.600 rings points



User-friendly interface



NAVIS

Nidek's Magellan Mapper uses the Corneal Navigator™ developed by Steve Klyce, PhD and Michael Smolek, PhD to screen for eight different corneal conditions including Pellucid Marginal Degeneration and Keratoconus. Utilizing corneal statistics developed by Dr. Klyce, this neural network software offers capabilities far beyond simple keratoconus screening, which may lead to false positives post operatively and false negatives for Pellucid.

The Magellan Mapper™ has the highest resolution of any placido topographer, with 60 rings and the industry's best distribution of 21,600 measured data points. And the Magellan Mapper™ accurately tracks without "ring lock" so highly irregular corneas provide meaningful data.

The Magellan Mapper™ is a clinician's topographer. Unlike many topographers, Magellan clearly labels interpolated and extrapolated data. Magellan exclusively uses color coded offset indices to inform the practitioner of the exam reliability.

The advanced low light cone makes exams comfortable for light sensitive patients. The easy to use one page interface allows the operator to easily and quickly access all data. The Magellan Mapper™ is the new industry standard for corneal topography.

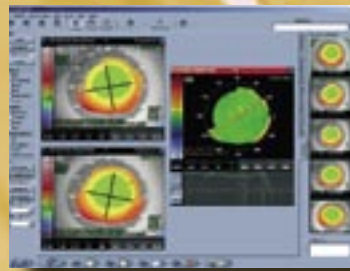
Give your patients the best, the Magellan Mapper™.



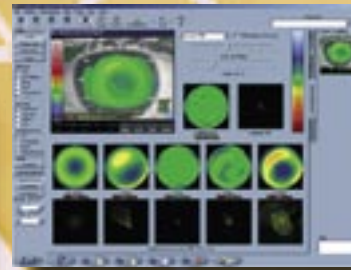




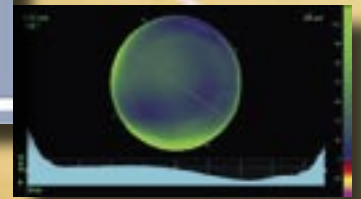
Corneal Navigator™



Orthokeratology



Corneal Aberrometry



Contact Lens Fitting

## State Of The Art Topographer

### Pre & Post Surgery

- Analyse Corneal Aberrometry through the Zernike decomposition software
- Fine tune surgical planning and predict outcomes
- Detect main vision defects
- Analyse the PSF (Point Spread Function)
- Evaluate over corrections
- Simulated Eye Chart displays corneal aberration

### Diagnosis & Follow-Up

- Automatic assessment of normal and abnormal corneal states
- Classify corneal modifications
- Document and track disease progression over time with the advanced, Keratoconus Severity Index (KSI)
- Corneal Navigator™ displays percentage similarities of disorders, increasing awareness of borderline diseases such as: Keratoconus, Pellucid Marginal Degeneration, Astigmatism, Hyperopic refractive surgery, Myopic refractive surgery, Penetrating Keratoplasty

### Contact Lens Fitting & Management

- Fit contact lenses accurately by simulating the real visco-elastic dynamics of the lens on the tear film to correct irregular astigmatism, high regular astigmatism, anisometropia, abnormal aniseikonia and normal ametropia
- Adjust fits fast and easily with an up-to-date lens database of the main contact lens manufacturers
- CL-Fit increases practitioner's efficiency and patient throughput
- Evaluate the corneal molding induced by over night application of Orthokeratology lenses

### Innovative software

- Wide range of applications
- Advanced graphical interface
- Corneal Navigator™
- Corneal Aberrometry
- Orthokeratology

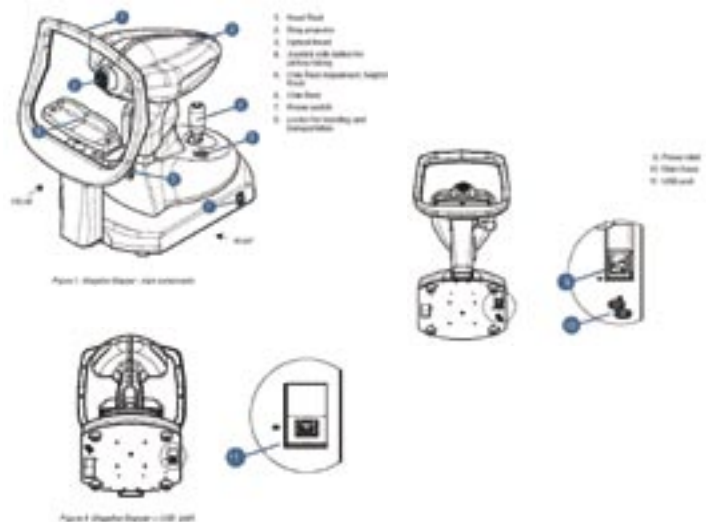


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## Technical Specifications

| Configuration         | Table-top instrument  |
|-----------------------|---|
| Cone                  | Sharp angle   |
| Analysed rings        | 60  |
| Weight                | 15 Kg / 29 lbs  |
| Analysed points       | Up to 21'600  |
| Camera resolution     | 768x576 pixels  |
| Joystick              | 3-axes motion control   |
| Software              | NAVIS + Contact Lens Fitting*+ Corneal Navigator*+ Corneal Aberrometry*+ Orthokeratology* |
| PC requirements       | Pentium III - OS: Windows 2000/XP<br>HD: 40 GB RAM:256 MB                                 |
| Storage               | Automatic back up on HD/Compact Disc  |
| Class                 | 1BF (according to IEC 601-1)  |
| Power                 | 100 to 240 VAC 50/60 Hz   |
| Laser                 | 1x Laser Class 2.<br>Max output 0.8mW at 635-670 nm<br>electronic limitations at 6uW      |
| Power consumption     | 25 W  |
| Operating temperature | 15/30 °C – 59/86 °F   |
| Relative humidity     | Not condensing 30÷75%   |

\* Included in MM Professional



## Features & Benefits

### • Corneal Navigator™: Increase Diagnostic Acumen – Predictive – Automatic Pattern Interpretation

Corneal Navigator™ automatically determines corneal features and shows, by percentage, the state of the Cornea: Normal (NRM), Astigmatic (AST), Keratoconus Suspects (KCS), Keratoconus (KC), Pellucid Marginal Degeneration (PMD), Myopic Refractive Surgery (MRS), Hyperopic Refractive Surgery (HRS) and Penetrating Keratoplasty (PKP). MM1 gives more objective data for the practitioner, thus increasing his predictive capabilities and his diagnostic acumen especially in borderline cases.

### • Highest Industry Resolution & Accuracy: More Information – Reliable – Perfect Fitting

The Placido based low light level cone works in conjunction with a dual border detection algorithm leading to the highest resolution in the topographic field: up to 21,600 measured data points! The high resolution, in addition to the offset indexes, increases the reliability of the exams leading to more accurate information and fittings.

### • Innovative Software: Quick exam – Easy To Administer – Increased Patient Flow & Through-put

The innovative corneal topography software leads to a fast and easy evaluation of the maps. The NIDEK MM1 is unique for its ergonomic design that increases performance and patient comfort. Ergonomic design, fixation target and laser spot allow easy alignment, reduce examination time and require minimum patient co-operation.

Medical Device Directive 93/42/EEC - Manufactured by Nidek Technologies S.r.l. – Albignasego (PD) Italy  
Design and specifications are subjected to change without notice for improvement



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Rev. 050412

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