



Specular Microscope
CEM-530

US Edition



THE ART OF EYE CARE



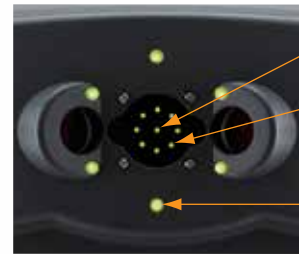
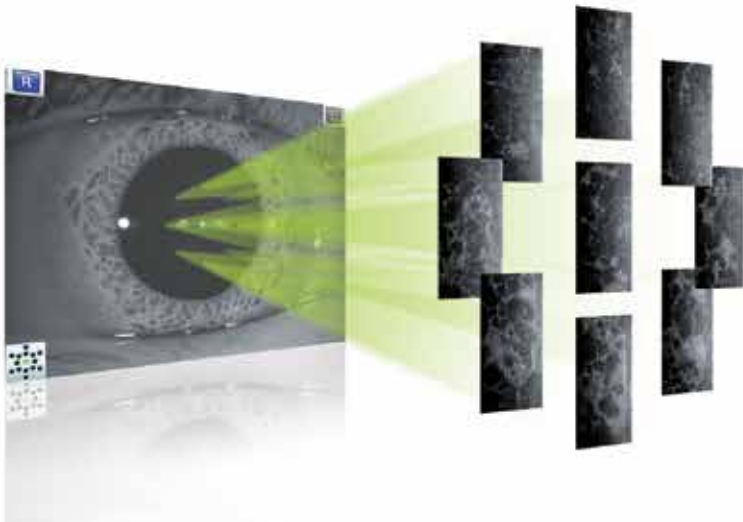
CEM-530

SPECULAR MICROSCOPE



Paracentral Specular Microscopy

In addition to conventional central and peripheral specular microscopy, the CEM-530 includes a unique function to capture paracentral images. The paracentral images are captured at eight points, 5° visual angle within a 0.25 mm x 0.55 mm field and enable enhanced assessment surrounding the central image.



Central
Paracentral
Peripheral

Simulated image of 15 fixation lights*
Central 1 point
Paracentral 8 points (5° visual angle)
Peripheral 6 points (27° visual angle)
*Only one selected fixation light is on.



Auto Indication of the Optimal Image



Optimal image

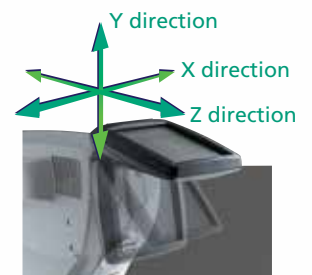
16 images are captured and automatically sorted based on quality and the ability to be analyzed. The optimal image for analysis is indicated with orange highlight.

This feature aids the clinician in the selection of the most suitable image for analysis and enhances reliability of the data.



3-D Auto Tracking, Auto Shot, and Tiltable Touch Screen

The 3-D auto tracking, auto shot, and tiltable touch screen provide ease of use, allowing faster and more accurate measurement.



Instant Printout with Built-in Printer

The built-in printer provides an instant printout of the analyzed data and images of the endothelial cells.



LED Light Source for Flash

The CEM-530 utilizes a LED light source for flash, which reduces power consumption, lasts longer, and saves on operational costs.



Two-second Auto Analysis

Rapid analysis increases the efficiency of the practice. Once the image is selected, complete analysis is automatically performed in two seconds with the CEM-530.

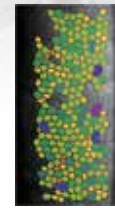
The analysis screen allows visualization of the endothelial cells in four modes, trace, photo, area, and apex, which helps the clinician to verify analysis values with the correspondent cell images.



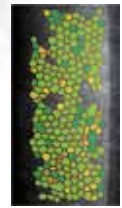
Analysis result (trace)



Cell image (photo)



Cell image (area)



Cell image (apex)



Detail analysis (trace)

The CEM-530 provides comprehensive analysis including two histograms of variation in shape (pleomorphism) and size (polymegathism). For detailed analysis, the range of analysis can be changed and the cells to be excluded can be selected at the user's discretion.



Change of analysis range

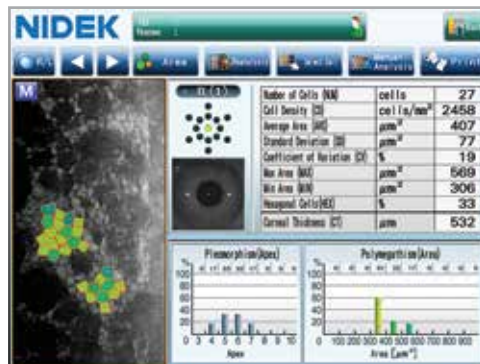
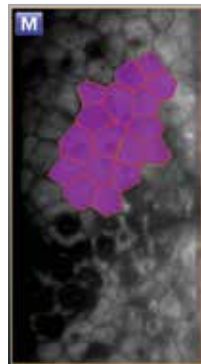
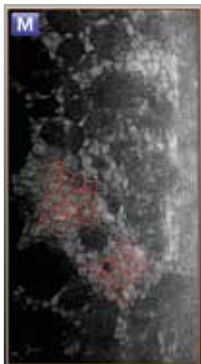


Selection of cell



Center Point Manual Analysis Function

The center point manual analysis is initiated by selecting the approximate center of a cell. Adjoining cells are then detected based on the surrounding points. This method is particularly effective for areas where groups of cells are clumped together. The versatility of automated and manual analysis allows speed and precision.



CEM-530 Specifications

Endothelial image capture	
Capture field	0.25 (W) x 0.55 (H) mm
Capture position	Central 1 point Paracentral 8 points (5° visual angle, 45° spacing) Peripheral 6 points (27° visual angle, 60° spacing)
Pachymetry	
Measurement range	300 to 1,000 µm
Accuracy	±10 µm
Auto tracking / Auto shot	X-Y-Z directions Auto shot
Display	Tiltable 8.4-inch color LCD touch screen
Printer	Built-in thermal line printer External video printer (optional)
Interface	LAN, USB, Video output (BNC connector for video printer)
Power supply	AC 100 to 240 V 50 / 60 Hz
Power consumption	100 VA
Dimensions / Mass	291 (W) x 495 (D) x 457 (H) mm / 20 kg 11.5 (W) x 19.5 (D) x 18.0 (H) " / 44 lbs.



Caution: U.S. Federal Law restricts this device to sale, distribution and use by or on the order of physician or other licensed eye care practitioner.

Specifications may vary depending on circumstances in each country.

Specifications and design are subject to change without notice.



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