

Specular Microscope CEM-530 U.S. Edition

THE ART OF EYE CARE

Multi Area Specular Microscopy

In addition to conventional central and peripheral specular microscopy, the CEM-530 includes a NIDEK original function that captures paracentral images. The combination of central, paracentral, and peripheral imaging provides a broader, overall view that can be used for detailed morphological and quantitative evaluation of the endothelial layer and individual cells.





Central 1 point Paracentral 8 points (ø1.3 mm*) Peripheral 6 points (ø7.3 mm*) * When R=7.8 mm

The position of fixation lights

Paracentral mode provides a total image of endothelial cells.

The paracentral mode allows detailed evaluation of cell shape, which is important for preoperative assessment.

For example, assessment of corneal guttata using a central image only is often clinically ineffective due to the limited number of countable cells.

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Paracentral image

Enhanced Usability and Quick Analysis

The 3-D auto tracking and auto shot functions result in a user friendly and patient friendly experience. Data analysis within 2 seconds allows efficient patient flow.



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 Viewer for NAVIS-EX

CEM Viewer is software used for viewing and working with CEM-530 data via NAVIS-EX. This function enhances the capability of the CEM-530 with additional features and increases the efficiency of any clinic.



NAVIS-EX is image filing software that enables data from the NIDEK diagnostic devices to be centralized in the NAVIS-EX database. It was initially developed for NIDEK's retinal products and has been expanded to network with the CEM-530.



Data Management and Endothelial Cell Count

Unlimited NAVIS-EX database is available for review on the CEM Viewer. The basic functions of the CEM-530 such as endothelial cell count are available on the CEM Viewer.

Progression Follow-up and Comparison

Multiple examination data sets are displayed in chronological order for follow-up. Additionally, two data sets are displayed for comparison. Endothelial changes can be monitored over time with this function.



Paracentral Display with Peripheral

The images and analyses of the paracentral and peripheral areas are displayed providing a comprehensive image of endothelial cells.



Product/Model name: Image Filing Software NAVIS-EX

CEM-530 Specifications

Endothelial image capture	
Capture field	0.25 (W) x 0.55 (H) mm
Capture position	Central 1 point
	Paracentral 8 points (ø1.3 mm*)
	Peripheral 6 points (ø7.3 mm*)
Pachymetry	
Measurement range	300 to 1,000 μm
Accuracy	±10 μm
Auto tracking	X-Y-Z directions
Auto shot	Available
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.

* When R=7.8 mm



Product/Model name: SPECULAR MICROSCOPE CEM-530 Caution: U.S. Federal Law restricts this device to sale, distribution, and use by or on the order of a 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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