



Specular Microscope
CEM-530



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.

The paracentral images provide comprehensive diagnostic information that enables precision of endothelial cell assessment, with the central image.



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.

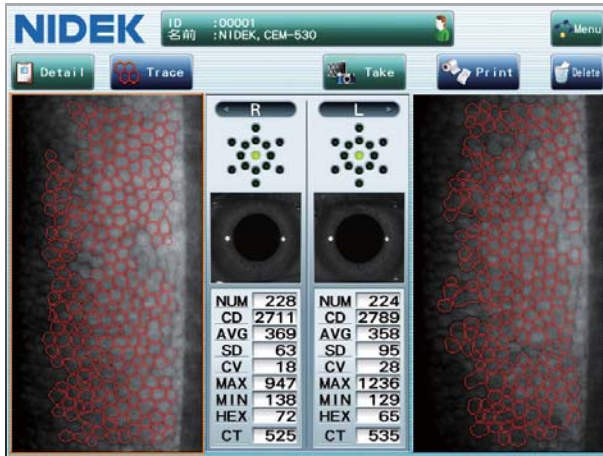
This feature aids the clinician in the selection of the most suitable image for analysis and enhances reliability of the data.



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.

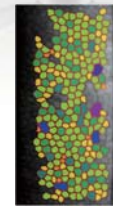
The analysis screen allows visualization of the endothelial cells in four modes, trace, photo, area, and apex, which helps the clinician to verify analysis values with the correspondent cell images.



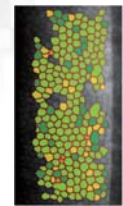
Analysis result (trace)



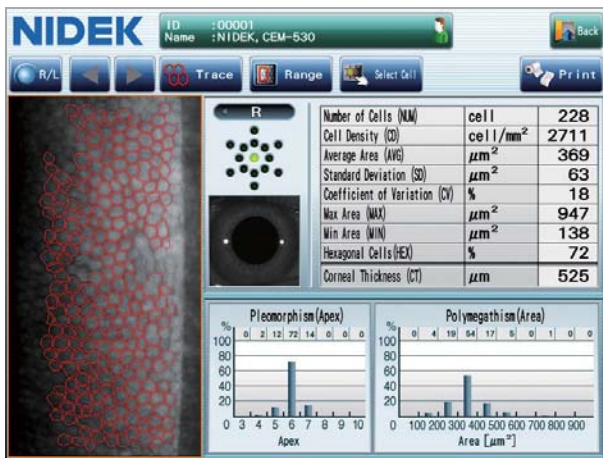
Cell image (photo)



Cell image (area)

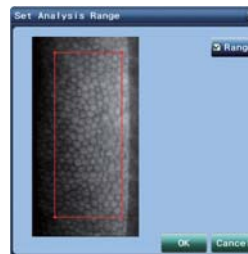


Cell image (apex)



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

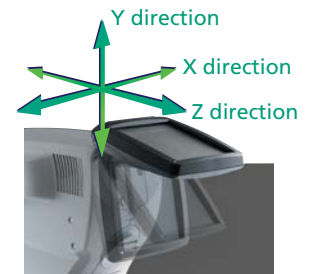


Selection of cell



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.

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	Tilttable 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.



FDA 510(k) is not cleared.

Specifications and design are subject to change without notice.



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