

Specular
Microscopy &
Optical Pachymetry



Konan's specular microscopes are the global gold standard for precision assessment of the most critical layer of the cornea, the endothelium.

Clinical Benefits

Pre-Operative Risk Assessment for Cataract, Refractive and Implant Surgery

As a “predictor of success”, endothelial analysis provides critical insight for surgeons regarding the stability of the cornea that can be used to improve outcomes, manage patient expectations (especially for patients considering premium IOLs), and mitigate potential liability.

Post-Operative Care and Co-Management

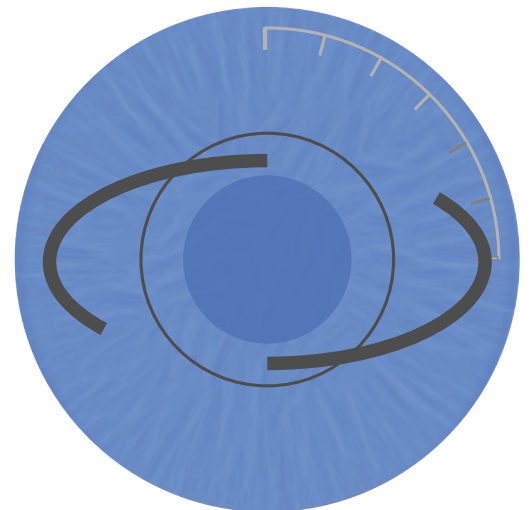
Post-operative assessment is essential to quantify surgical trauma and monitor tissue rejection from ocular surgery. Even during uneventful phacoemulsification, endothelial cell loss can be as high as 15%, therefore monitoring subsequent cell morphology during the healing process is critical. It may also be useful for monitoring signs of tissue rejection, for example post DMEK.

General Assessment of the Cornea

CellChek is a quick and effective method of screening for unsuspected changes and can aid the diagnosis and proper treatment of corneal diseases as such as Fuchs’ Dystrophy, keratoconus, other corneal dystrophies and trauma.

Contact Lens Patient Management

CellChek provides a detailed analysis of contact lens-related endotheliopathies caused by poor hygiene, low oxygen transmission or incorrectly fitted lenses. CellChek imaging also supports recommendations for premium lenses, patient compliance, and aids decision making for treatment plans or corrective action.



“We utilize the Konan specular microscope after all of our DSAEK surgery. The information that the specular microscope provides is valuable for assessing the long term effects of the surgical trauma of the procedure, and specular microscopy is critical to understanding your personal outcomes with DSAEK.”

*Mark Terry, MD
Devers Eye Institute, Portland, OR USA*

Gold Standard Analysis Methods

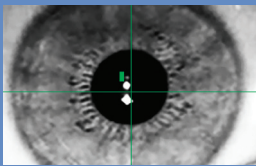
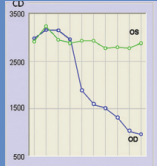


All Konan specular microscopes feature Center Method™ and Flex-Center™ semi-automated analysis tools. Center Method is mentioned in FDA panel minutes as being the “gold standard” and is used by virtually every professional reading center for independent assessment of corneal endothelial analytics.

The Center Method provides high precision and repeatability for specular images in which relatively small continuous areas of cells are present.

The Flex-Center™ method is an additional tool for advanced stage diseased corneas in which only a very few cells are visible. With this semi-automated, perimeter-count method, again high precision and repeatability is achieved. Only Konan provides the rich set of analytic tools for reliable assessment of the entire spectrum of corneal conditions.

Fully automated analysis is also available, but is only recommended for relatively healthy corneas with large areas of visible cells.

Konan Exclusive Features

Location	Trend Analysis	FDA Cleared Device & Database	Non-Contact Pachymetry	IOL ICL Mode																											
			<table border="1"><tr><td>2770</td><td>CD</td><td>2747</td></tr><tr><td>26</td><td>CV</td><td>28</td></tr><tr><td>50</td><td>HEX</td><td>49</td></tr><tr><td>150</td><td>NUM</td><td>147</td></tr><tr><td>522</td><td>PACH</td><td>541</td></tr><tr><td>361</td><td>AVE</td><td>364</td></tr><tr><td>770</td><td>MAX</td><td>665</td></tr><tr><td>172</td><td>MIN</td><td>193</td></tr><tr><td>95</td><td>SD</td><td>103</td></tr></table>	2770	CD	2747	26	CV	28	50	HEX	49	150	NUM	147	522	PACH	541	361	AVE	364	770	MAX	665	172	MIN	193	95	SD	103	
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95	SD	103																													
Detailed image of the anterior segment with green rectangle showing location of cell sample location. Automatically records the location from which the data sample was acquired.	Clear, automated assessment of changes over time. Statistically valid trends can only be obtained if you are comparing data from the same location.	Integrated database management allows robust data mining and simplified data management with most popular EMR / EHR systems and optional DICOM compatibility.	Independent studies have shown the pachymetric values to be as accurate as ultrasonic pachymetry, with less potential trauma to the cornea.	Automatic measurement may be difficult for patients with an intraocular lens or other device implanted. Easily view the index of refraction using IOL ICL mode.																											

KonanCare

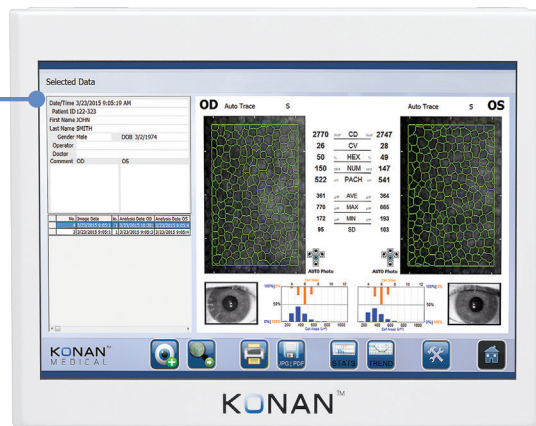
CellChek SL comes with one year of extra protection through the highest priority support system.

- White-gloved installation and initial training
- Remote training support
- Remote technical support
- Priority service call back
- Software updates

"My Konan specular microscope is the best investment that I have ever made."

Steven Bovio, OD
Gulf Coast Eye Center, Sarasota, FL, USA

Integrated touch-screen computer



All-in-one compact design

Auto inter-eye positioning

Single motorized chin rest

Accurate and Repeatable Specular Microscopy

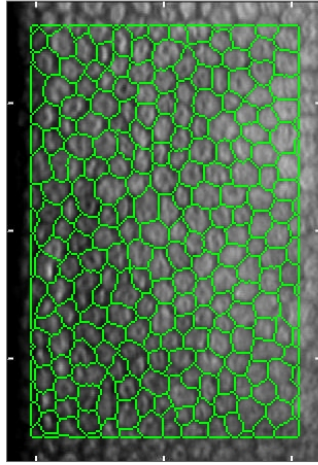
Clear Endothelial Density & Morphology Analytics

Selected Data

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 First Name Jane
 Last Name Doe
 Gender Female DOB 1/1/1940
 Operator John Smith
 Doctor Dr. Eyecare
 Comment OD OS

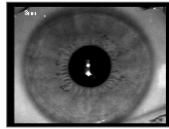
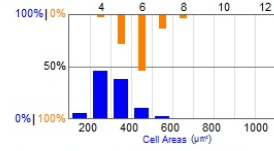
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OD Auto Trace S

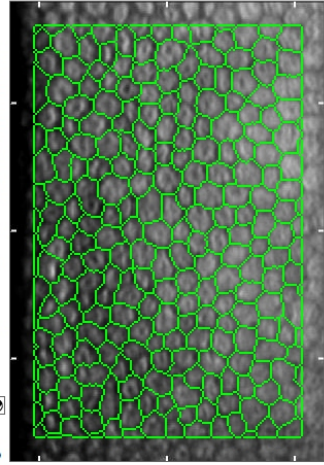


3236 /mm² CD /mm² **3236**
24 CV **24**
54 % HEX % **54**
178 cells NUM cells **178**
500 μm PACHY μm **500**
309 μm AVE μm **309**
528 μm MAX μm **528**
161 μm MIN μm **161**
75 SD **75**

AUTO Photo

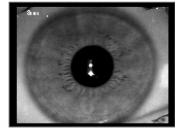
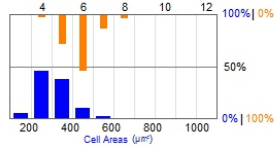



Auto Trace S **OS**



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AUTO Photo

KONANTM MEDICAL

NEW IMAGE ANALYSIS PRINT OUTPUT FILE UTILITIES BACK

Analytic methods tailored to the disease state of the endothelium plus onscreen sample location data.

Specifications

Type	Class I, Type B electrical equipment
Operating conditions	Ambient temperature: 10 to 40°C Relative humidity: 30 to 85% (no condensation) Atmospheric pressure: 70 to 106 kPa Ordinary equipment (no protection against ingress of water) Operation mode: continuous operation
Photographic capability	Automatic or Manual
Photographic location	Center, Peripheral locations (12 o'clock, 2 o'clock, 10 o'clock, 6 o'clock)
Imaging method	Non-contact: auto-alignment, auto-focus, auto-capture, auto cell count
Imaging field	0.1 mm ²
Measurement accuracy (corneal thickness)	±10 µm or better
Analytical accuracy	Cell area (Center Method): ±5% Cell area (Cell Screener Method): ±15%
Camera	Built-in CCD image sensing element camera
Flash	Konon Xe tube
Focusing illumination	Konon Halogen lamp
Output function	Video terminal (NTSC signal)
Input function	Mouse terminal, exclusive remote control terminal
Input voltage	100-240VAC, 50/60 Hz
Fuse	3A (250V) x 2 (Fast Blow 5 x 20)
Power consumption	70 VA
Weight	20.5 Kg
Dimensions	~ 420(H) X 334(W) X 486(D) mm
Transport and storage condition	Ambient temperature: -20 to 60°C Relative humidity: 30 to 95% (no condensation) Atmospheric pressure: 50 to 106 kPa

USA Reimbursement: CPT 92286

Konon specular microscopy offers remarkable value both clinically and financially.

Distributed By

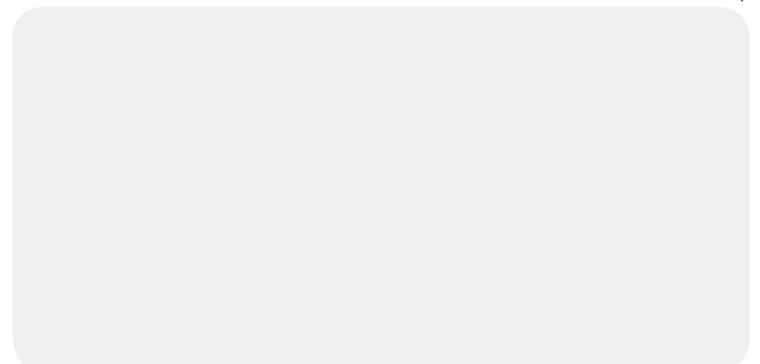


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