

The **automatic analysis** enables the endothelial image to be displayed per various options:



**Photo** – captured image of the endothelial layer



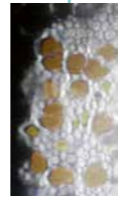
**Trace** – outlines of extracted endothelial cells



**Area** – colour-coded according to cell size



**Apex** – colour-coded according to cell shape



**Dark area** – automatically extracts dark areas

## Specifications

### MEASUREMENT

Measurement method	Non-contact
Pixel of CCD camera	480 (V) × 180 (H)
Capturing scope (WxH)	0.25 mm × 0.54 mm
Measurement range central corneal thickness	300 - 1000 µm
Measurement accuracy central corneal thickness	+/- 10 µm
Photography magnification	220x
Number of fixation points	1 central + 12 peripheral
Number of images per examination	16

### MAIN UNIT

Display size	10.4" colour LCD
Stroke of moving sections (X,Y,Z axis)	88 mm, 40 mm, 50 mm
Stroke of chin rest	70 mm

### ANALYSIS

Analysis method	Automatic analysis, L-count, Core method, Dark area analysis
Analysis values	Number (the number of analyzed cells) CD (cell density) AVG (average cell area) SD (standard deviation of cell area) CV (coefficient of variation of cell area) Max (maximum cell area) Min (minimum cell area)
Histogram	Area (Polymegathism: Distribution of cells according to their size) Apex (Plemorphism: Distribution of cells according to their shapes)

### DATA MANAGEMENT

Built in printer	Thermal printer
Internal database	SD Card
Data output	USB-H, USB-D, LAN

### DIMENSIONS AND ELECTRIC REQUIREMENTS

Dimensions WDH	309 × 491 × 450 mm
Weight	22 kg
Voltage	100 VAC to 240 VAC
Frequency	50/60 Hz
Power consumption	100 VA

#### RODENSTOCK Instruments

Wiesbadener Strasse 21  
90427 Nürnberg, Germany  
Phone +49 (0)911 938 546 2777  
Fax +49 (0)911 938 546 220  
info@rodenstock-instruments.de  
www.rodenstock-instruments.de



RODENSTOCK Instruments is a business unit of TOMEY GmbH

2022/03 – subject to change without notice

# RODENSTOCK Instruments



# REM 4000

# Specular Microscope



# The REM 4000: Tune up your business



”

Knowledge about the condition of the endothelial layer is useful in many situations during the eye check-up. With REM 4000, it's easy to capture this super-thin layer.

“

## What are your benefits?



**Reliability**  
Counts up to 300 endothelium cells with each picture for a representative analysis



**Expertise**  
Qualitative and quantitative assessment of the corneal endothelium



**Personalisation**  
Various analysis methods: automatic analysis, dark area, L-count, and Core method



**Hygienic**  
Patient-friendly non-contact examination



**Added value**  
Pachymetry (CCT) is measured simultaneously with each central exam



**Time-saving**  
Get the measurement done within 4 sec. per eye

Your digital partner  
in consulting.

## Outstanding features

### Continuous auto-capture

Of 16 images – to select the best shot with optimal sharpness

### Built-in thermal printer

To display the endothelial image and the analysis results

### Internal database

Store up to 16,000 clients on the integrated SD card

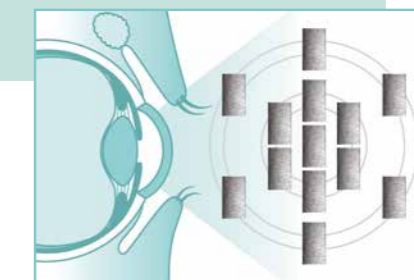


### Fully automatic

Auto alignment and auto measurement

### Wide capture area

13 fixation points for parafoveal and peripheral images

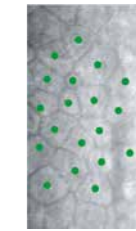


### Manual and semi-manual analysis methods

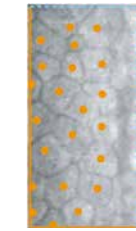
High-quality images enable the analysis of cell density and the detection of irregularities in or degeneration of the endothelium, such as Polymegathism and Pleomorphism. You can choose from several analysis methods.



Trace method



Core method



L-count method