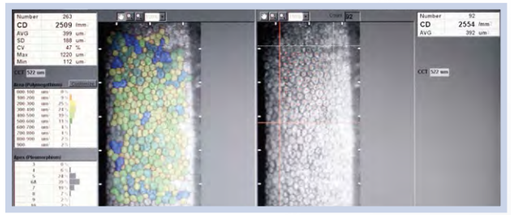
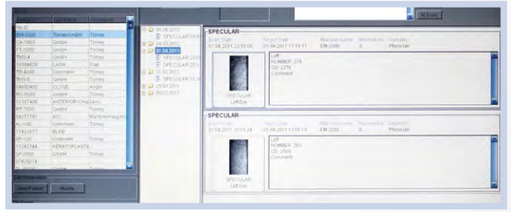
SPECIFICATIONS

RESOLUTION	
Pixels used for picture taking	480 (V) x 180 (H) pixels
Capturing scope	0.25 x 0.54 mm
1 centre + 6 peripheral measurements	7 x fixation points (centre; 2; 4; 6; 8; 10; 12 o'clock)
Min. cell resolution	1.14 µm (V) x 1.45 µm (H)
Optical magnification	x 190
Display	8.4'' LCD Colour
Display resolution	1.14 µm
MEASUREMENT	
Auto alignment	Yes
Auto shot	Yes
Manual mode (1&2)	Yes
MEASUREMENT FUNCTION	
Automated captured examination	15 pictures for analysis Up to 300 cells Cell density CV / SD Cell size (average, min., max.) Cell morphology (Polymegathism, Pleomorphism) Non contact Pachymetry (240 µm - 1000 µm)
Stroke of moving section	X: 88 mm Y: 40 mm Z: 50 mm
Stroke of electrical chin rest	70 mm
Measuring accuracy Pachymetry	+/- 10 µm
DATA MANAGEMENT	
Print out	Via PictBridge printer
Data export	Via data transfer SW
OPERATING ENVIRONMENT	
Temperature	+10° to +40°
Humidity	30 % to 75 %
Atmospheric pressure	700 to 1060 hPa
Standards applied	MDD Annex ii, iSo 13485
COMMUNICATION PORTS	
USB	For PictBridge printer
LAN	Data Transfer SW

EM-3000 SOFTWARE (OPTIONAL)

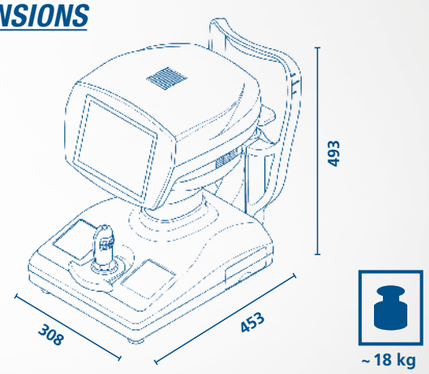
The optional EM-3000 software enhances the unit to become a powerful endothelium measurement device, including a sophisticated database function. Even the recalculation of stored images and a manual L-count is possible. The EM-3000 software runs on most conventional PCs / laptops using XP or Win7 operation systems.





DIMENSIONS & ELECTRIC REQUIREMENTS	
Dimensions WDH	308 x 453 x 493 mm
Weight	Approx. 18 kg
Voltage	AC 100 to 240 V
Frequency	50/60 Hz
Power consumption	100 to 130 VA

DIMENSIONS



MERCOFRAMES OPTICAL CORP
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Tel. 305-882-0120
ale@mercoframes.com

SPECULAR MICROSCOPE EM-3000

ENDOTHELIUM ANALYSIS + PACHYMETRY

DELIGHT IN SIGHT

Stand alone, fast and easy handling.

- Auto alignment + auto shot
- Dark area analysis
- Counts up to 300 cells
- 7 measurement areas
- Alternative L-count analysis
- Integrated non contact Pachymetry
- Morphology and density diagrams
- Optional database + analysis software

TOMEY
TECHNOLOGY AND VISION

THE TOMEY EM-3000 SPECULAR MICROSCOPE

QUALITY IN DETAIL

Non-contact examination, auto alignment and shot plus automatic analysis of the endothelium layer make working with the **EM-3000** professional and quick. Thanks to our auto alignment technology we can assure the reproducibility of the measured area and therefore also the analysed values.

The integrated non contact pachymetry will be automatically measured with every central examination. The big colour touch screen is used as an operating monitor as well as for displaying all measured values. All commands can be given via touch screen.

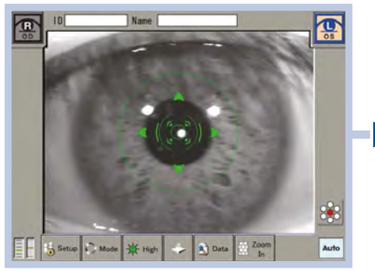
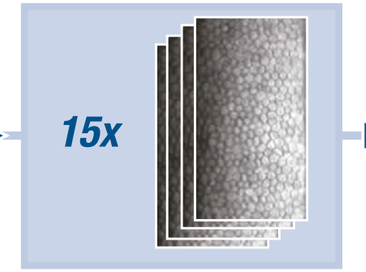
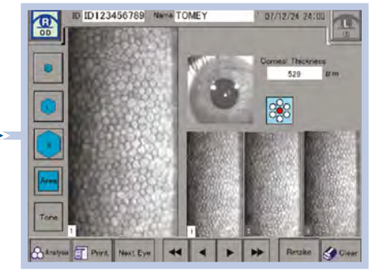


Image is taken automatically



Automated capturing of 15 images



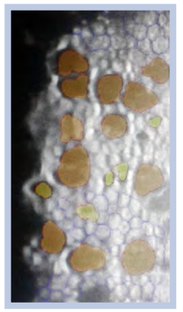
Best image

Endothelium layer

Traced image

Different sizes displayed in colours

Polygonal shapes displayed in colours



Dark area analysis

AUTO ALIGNMENT + AUTO SHOT

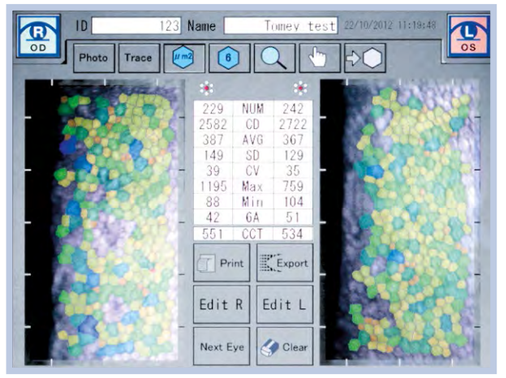
The handling of the EM-3000 is very easy – it does almost everything by itself. Alignment and measurement are done automatically. Of course you also can do the examination in the manual mode.

7 MEASUREMENT AREAS + AUTOMATIC PACHYMETRY

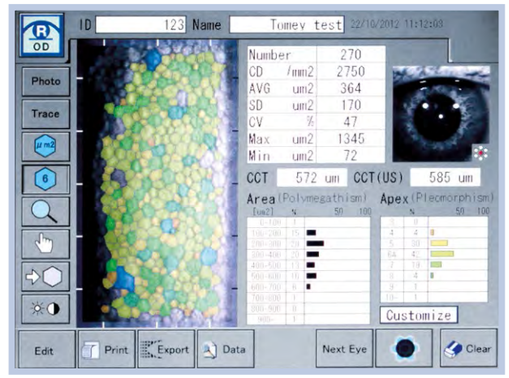
The EM-3000 has a very large measurement area. With up to 300 counted cells the system assures a representative cell density analysis of your patients' cornea. Images can be taken at 7 positions: the centre and 6 peripheral points. Additional to that the thickness of the cornea will be automatically measured with every central exam – of course in non contact method.

FAST AND FULLY AUTOMATED ANALYSIS OF CORNEAL ENDOTHELIUM CELLS

The software evaluates all relevant data respective to the endothelium, such as the density of cells as well as Polymegathism and Pleomorhism (morphology). High-quality images enable discovering irregularities or possible degeneration of the endothelium. For these difficult cases you can use the classical L-count function and our special dark area analysis tool.



Dual view (R+L)



Colour analysis

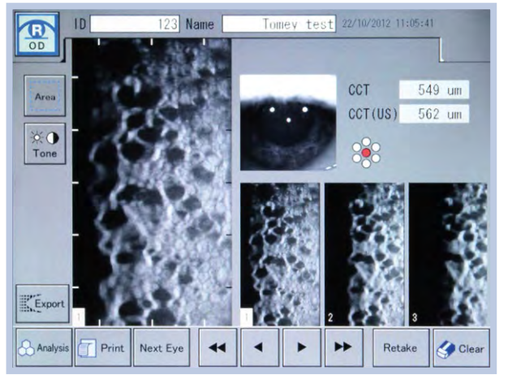
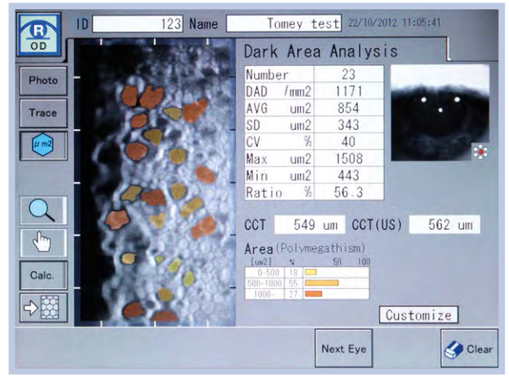


Image select



Dark area analysis

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