

One vision, Two sharp eyes with Our Innovation

# EM-3000

SPECULAR MICROSCOPE



- Serial photographs of 15 shots
- Wide photographing range
- 7 capturing positions
- Manual photographing
- LED light source
- Simple analysis using the L-count method
- Quick and automatic analysis
- Various display functions

## EM-3000 SPECIFICATIONS

### Observation and analysis of corneal endothelium

#### Photographing method

Non-contact

#### Photographing range

0.25mm x 0.54mm

#### Measurement mode

Auto / Manual 1 / Manual 2

#### Capturing position

Center + 6 peripheral points

#### Cornea thickness measurement accuracy

+/- 10  $\mu$ m

#### Analysis method

Automatic analysis / L-count

#### 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 by areas)

Apex(Plemorphism: Distribution by polygonal shapes types)

### Main unit

#### Display

8.4"color LCD

#### Stroke of moving sections

88 mm (X axis); 40 mm (Y axis); 50 mm(Z axis)

#### Stroke of chin rest

70 mm

#### Data output type

Printer /LAN/ USB

#### Dimensions and weight

308 (W) x 493 (D) x 453 (H) mm; approx. 18 kg

### Power source

100 VAC-240VAC ; 50/60 Hz; 100 VA -130VA



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All-in-one  
SPECULAR MICROSCOPE

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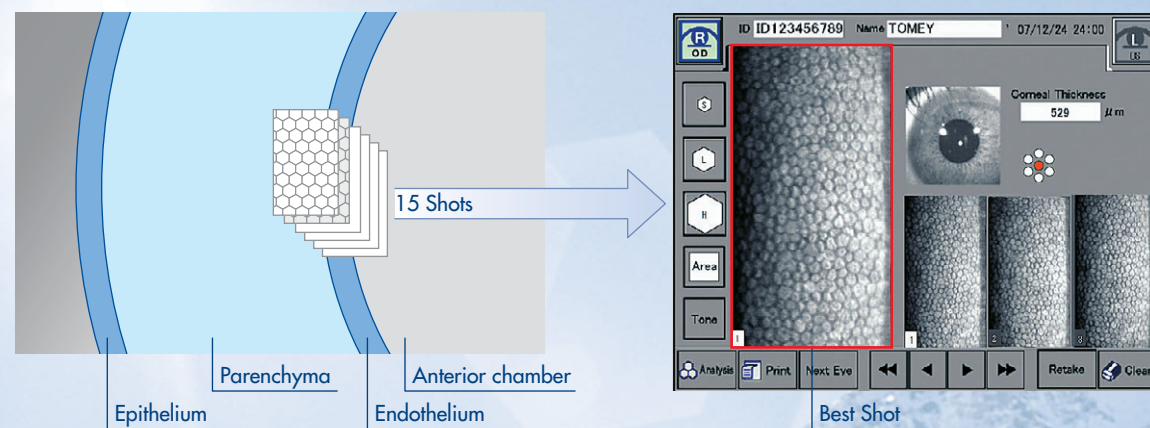
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## EM-3000 SPECULAR MICROSCOPE

# All-in-one SPECULAR MICROSCOPE with “Corneal endothelium photographing” and “Automatic analysis”

## Serial photographs of 15 shots

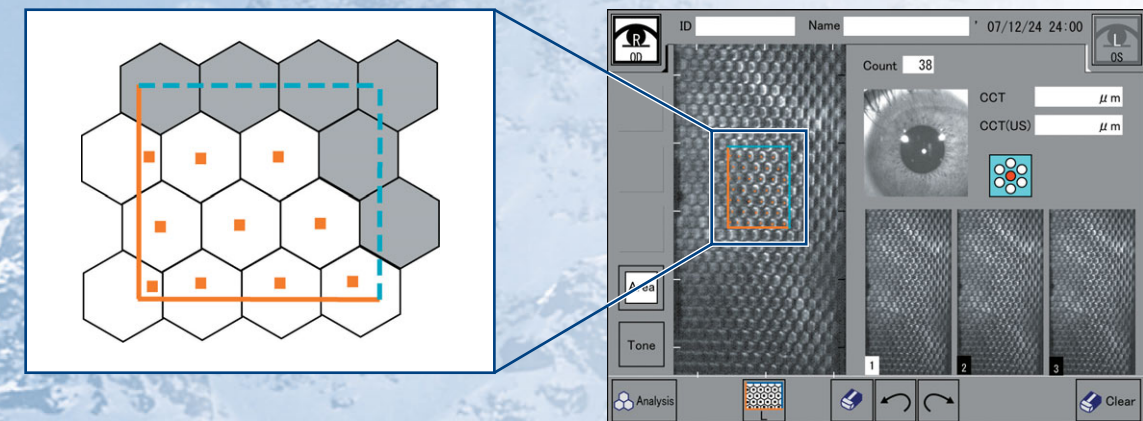
15 shots can be taken in series and errors during photographing are reduced. In addition, the best image among the 15 shots is automatically selected and displayed on the screen.



## Simple analysis using the L-count method

L-count method

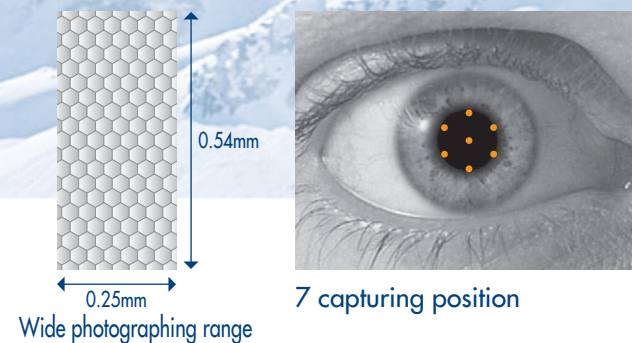
Using the L-count function allows the physician to select cells on the image within the specified area and calculate the cell density by touching the cells on the screen with a stylus pen.



## Wide photographing range and 7 capturing positions

Our unique technology enables a wide photographing range of 0.25 x 0.54 mm and allows you to observe the endothelium over a wide range. Photos can be taken at 7 points: the center and 6 peripheral points (2, 4, 6, 8, 10, and 12-o'clock positions on a  $\phi 6$  mm arc).

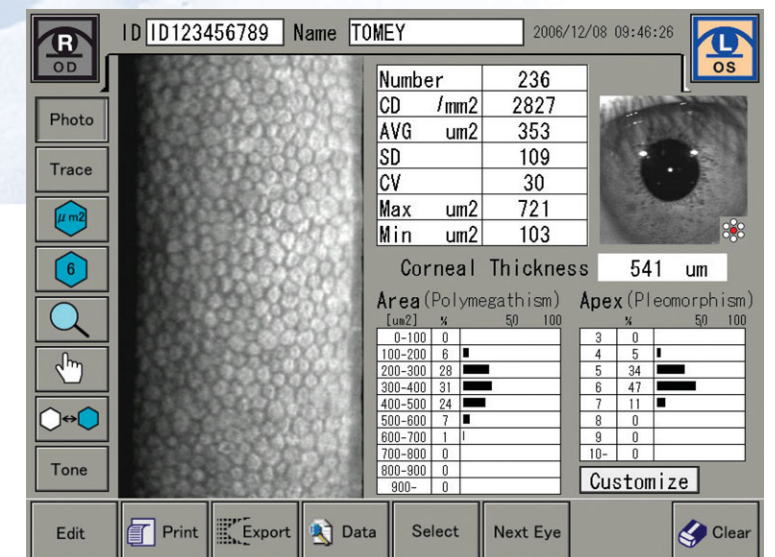
Because there are many photographing points, you can select the point with the best conditions even when the cornea surface is irregular. The cornea thickness is also measured at the same time.



## Quick and automatic analysis of corneal endothelium cells

The software for automatic analysis is pre-installed, so images are analyzed automatically without using personal computers.

Colorful icons and touch panel ensure easy operation for anyone.



Analysis results screen

## Manual photographing is also available

When automatic photographing is difficult, you take photos manually using the power joystick.

## LED light source

A long-life LED has been introduced for the photographing light source instead of the conventional xenon lamp, which requires maintenance. Regular replacement of the lamp is a thing of the past.

## USB connector for printer and LAN connector for PC

- USB-D connector: Connected to a Pict Bridge compatible printer to print images of the corneal endothelium and analysis results.
- USB-H connector: Connected to a barcode reader or electromagnetic card reader to enter patient ID data. A digital printer may also be connected.
- LAN connector: After installing the “Data Transfer” software provided with the EM-3000 in your personal computer, inspection result files assigned a patient ID can be saved in the personal computer.

## Various display functions

The image of the corneal endothelium can be displayed with the cell shapes traced, as well as with different areas and structural forms of cells displayed in different colors. This provides a visual understanding of the condition of the corneal endothelium.

