#### **Specifications**

Observation & Photography of Fundus Image

Observation & Fliotography of Fundus IIII	age
Scan Mode	Color, FA*, Red-free**
Observation	Near IR
Picture Angle	45°
	Equivalent 30° (Digital Zoom )
Diopter Scale Range ***	-13D to +12D (in fundus photography)
Operating Distance	40.7mm (in fundus photography)
Photographable Diameter of Pupil	45°: φ 4.0mm or more
	Small pupil diameter: $\phi$ 3.3mm or more

Observation & Photography of Fundus Image

Scanning Range	(On Fundus)	[Lateral] within 3~9mm [Vertical] within 3~9mm
	(On Cornea)	[Lateral] within 3~6mm [Vertical] within 3~6mm
Scan Patterns	Macula: 3D Scan	512×128 ( 128 horizontal scan lines comprised of 512 A-scans ), 6×6mm
(Recommended)	Macula: Radial Scan	1024×6 or 12 ( 6 or 12 radial scan lines comprised of 1024 A-scans ), 6mm
*****	Macula: 7 Line Raster	1024×7 (1024 A-scans per B-scan×7) , 6mm
	Disc: 3D Scan	512×128 ( 128 horizontal scan lines comprised of 512 A-scans ), 6×6mm
	Disc: Circle Scan	1024 A-scans, φ3.4mm
Scan Speed		27,000 A-scans per second
Scan Depth		2.3mm
In-depth Resol	ution	5μm ∼ 6μm
Photographabl	e Diameter of Pupil	φ 2.5mm or more

Observation & Photography of Fundus Image / Fundus Tomogram

Retinal Layers Identified	Macula: ILM, IS/OS, RPE, BM
OCT Reference Focus	Vitreous and Choroid
Fixation	Adjustable internal matrix LCD and external fixation device
	(Matrix LCD : The display position can be changed and adjusted.
	The presenting method can be changed. )

**Light Source / Power Source / Power Supply** 

Light Source / Tower Source / Tower Supply		
Light Source	Super luminescence diode(SLD)	
	Wavelength: 840nm	
	Half Bandwidth: 50nm	
	Output on cornea ≤ 0.65 mW	
Power Source	Voltage: 100/110/120/220/230/240V	
	Frequency: 50-60Hz	
Power Supply	200VA (Max 400VA)	

Dimensions / Weight

Differsions / Weight	
Dimensions	545mm(W)×535mm(D)×600 $\sim$ 630mm(H)
Weight	35kg(3D OCT-2000)
	36kg(3D OCT-2000 FA)

<sup>\*</sup>Only for FA models

\*Subject to change in design and/or specifications without advanced notice.

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In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.







#### TOPCON CORPORATION

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TOPCON CANADA INC.

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#### TOPCON SINGAPORE MEDICAL PTE. LTD.

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## TOPCON INSTRUMENTS (THAILAND) CO.,LTD.

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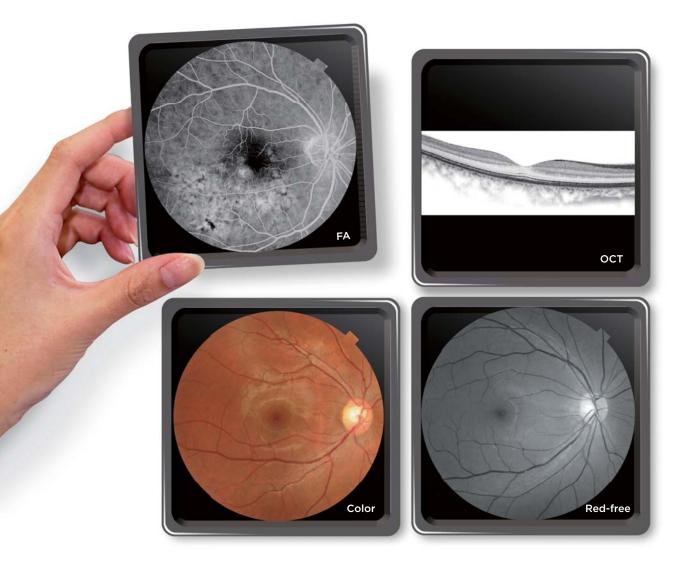
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# **Optical Coherence Tomography** 3D OCT-2000 / 3D OCT-2000 FA



<sup>\*\*</sup>Display digital Red-free \*\*\*\*More variable scan patterns available with a combination of different pixel and scan range.

<sup>\*</sup> Please check with local Topcon dealer for PC specification.



### Changing Your View of Retina

Topcon 3D OCT System is the only Spectral Domain OCT system to incorporate a high resolution retinal camera and a user friendly color touch screen display in a compact, space saving design. The new 3D OCT-2000 FA model enables fluorescein angiography, color and red-free to be combined with SD OCT to change your view of the retina. Today more than 3500 Topcon 3D OCT systems are used worldwide.

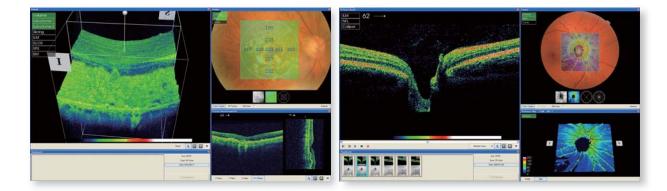
#### **Features**

- Integrated, high resolution retinal camera for color, red-free and FA\* fundus imaging
- » Color touch screen display
- » Auto disc centering, automatic capture functions and automatic extended depth imaging (Enhanced Choroidal Mode) ensure that anyone can take high quality images with minimal training
- » High resolution, high density SD OCT imaging with IR tracking and automatic eye movement correction produce the highest quality image

- FastMap<sup>™</sup> software enables dynamic viewing of 2D, 3D and fundus images simultaneously
- » Historic patient data from Stratus® OCT can be easily imported, analyzed and viewed
- » Seamless integration with Synergy® Image Management System

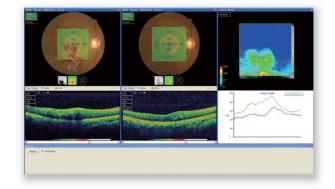
## State-of-the-Art Technology Increase Your Diagnostic Capability

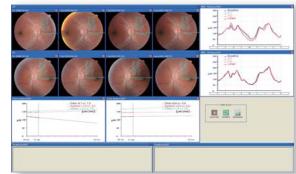
Topcon is always striving to provide the best possible products to meet the current and future needs of our customers. The advanced applications of Topcon 3D OCT will contribute to a better understanding of pathology and staging.



#### New diagnostic indicator could be built by the three-dimensional analysis

Macular and disc volume rendering of the 3D data set provide excellent visualization of structural changes of the retina, vitreoretinal interface, convex elevation, swelling and thinning of layers, allowing clinicians to have quantitative interpretation of retina.





#### Comparison function and RNFL trend analysis function

These dynamic comparison tools the monitoring of disease and treatment. Precise automatic registration assures examiners are analyzing the same scanned position under the same scanning condition everytime.





# Quantitative and Highly Reproducible Data with Extreme Ease of Use

Easy 4 Steps

Ex) OCT photography



Choose scanning pattern using color touch panel interface



#### **Register or Select patient**

Register or select patient from the OCT Viewer software.  $^{\mathsf{TM}}$ 

By inputting patient's axial length, corneal curvature, refractive diopter, Topcon Circle Scan Diameter Correction™ adjusts this circle to keep the consistent size diameter of 3.4mm from the retina.



#### **Color touch panel interface**

Intuitive color touch panel allows easy selection of a scan pattern icon. Scan icons are easily personalized from the selection of over 500 different scan patterns. Up to 9 scan pattern icons can be displayed one screen.





Capture

#### Color / OCT photography

Auto functions ensure that anyone can take high quality images with minimal training.

Color retinal photography: Auto focus / Auto shoot

OCT photography: Auto focus / Auto Z&Z lock /
Auto polarization

#### **FA** photography

To start FA photography. Touch at the same timing of dye injection. Timer starts to count. The photography mode can be easily switched between color and FA during capture without stopping the FA timer.



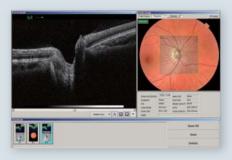




Image will be automatically exported to PC

#### OCT Viewer™

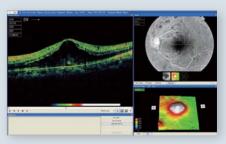
Instant comparison of en face OCT projection image and color retinal image is available.



Ex.3D Disc

#### **Import Function**

Any fundus image (Color, FA, FAF, ICG, Red-free) can be imported and compared with OCT image.



Ex.Import Function



Easy 4 Steps

# Quantitative and Highly Reproducible Data with Extreme Ease of Use





Register / Select patient

#### Register or Select patient

Register or select patient from the OCT Viewer software.

By inputting patient's axial length, corneal curvature, refractive diopter, Topcon Circle Scan Diameter Correction<sup>™</sup> adjusts this circle to keep the consistent size diameter of 3.4mm from the retina.



Choose scanning pattern using color touch panel interface

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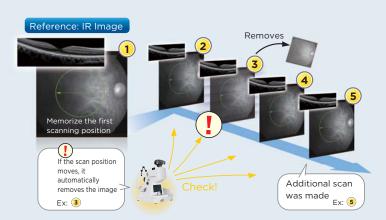




Topcon's advanced OCT technology significantly reduces eye movement artifacts and noise

#### >> IR Tracking Function

If the scanned area moves during capture Topcon's IR tracking technology removes suspect scans and automatically rescans missing area.



#### >> 3D Disc Scan

>> Circle Disc Scan

When 3D disc scanning, the red box  $(4.0 \times 4.0 \text{mm})$  makes it easier to automatically generatesautomatically generates RNFL thickness value extracted from a 3.4mm peripapillary circle of data points centered on the optic disc. The green box shows the 6.0 × 6.0 mm scanning

Auto disc lock & auto disc search function

results and improve visit to visit and inter/

makes it easier to automatically generates

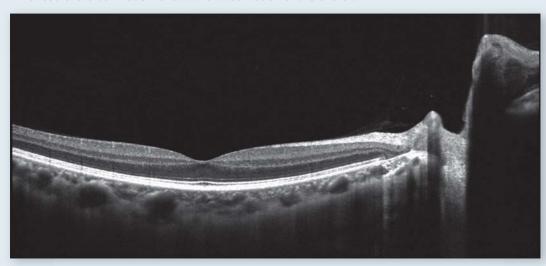
provide more precise RNFL thickness

intra operator reproducibility.



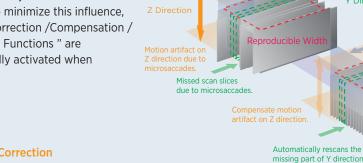
#### >> Enhanced Choroidal Mode

Enhanced choroidal mode™ allows the visualization of the choroid.



Motion Correction / Compensation / **Rescanning Function** 

Microsaccades and other fixation issues are a major cause of motion artifacts. To minimize this influence, " Motion Correction / Compensation / Rescanning Functions " are automatically activated when capturing.



» Motion Correction

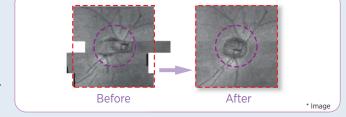
Corrects the Z direction movement.

#### » Compensation Function

Tracks ocular and scans  $7 \times 7$ mm area, then compensates X direction movement.

#### » Rescanning Function

Y direction movement can sometimes miss scanning area. In such case, the rescanning function automatically activates.



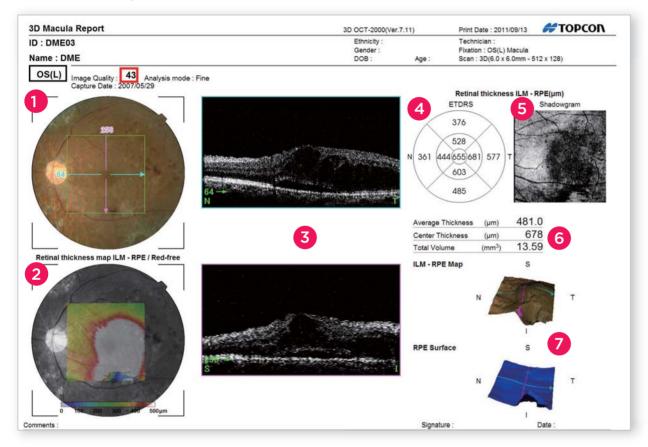
Scan Width: 7mm Reproducible Width: 6mm

\*Available with disc 3D scan, 6×6mm

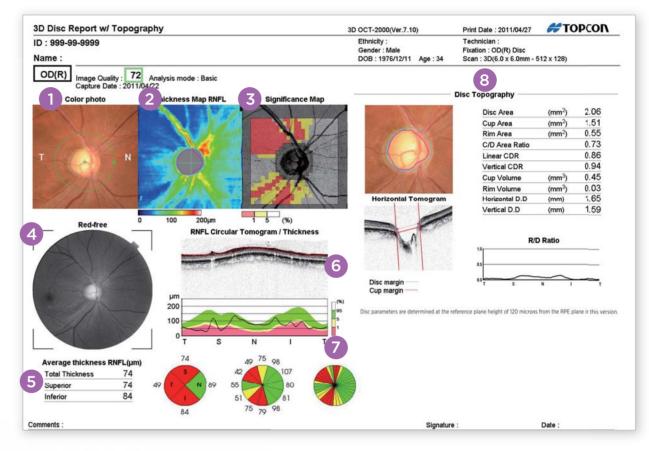
Compensate motion artifact on X direction.

Topcon 3D OCT reports provide and unprecedented level of information to the clinician with OCT, color, and red-free images placed in one report. All the information you need is here. Enjoy enhanced communication with your patients and clinical care.

#### **3D Macula Report**



#### **3D Disc Report**



Color Fundus Image

The green box shows the OCT scanned area. The blue arrow (horizontal) and the pink arrow (vertical) on the color fundus image indicates the displayed tomogram. The displayed tomogram location can be changed.

- Red-free Fundus Image (Digital) ILM-RPE color map is overlaid.
- Horizontal & Vertical Tomogram Pseudo Color / Gray / Inverted Gray tomogram can be displayed.
- **ETDRS**

ETDRS (nine map sectors) thickness value\* will be helpful in detecting subtle macular thickening or thinning in microns.

\* Macular volume can also be shown instead of thickness value.

5 Shadowgram

Average/Center/Total thickness value appears.

ILM-RPE Map & RPE Surface

Easy to observe overall and RPE macular condition.

Surface photograph of the assembled OCT B-scans.

Color Fundus Image

The green circle indicates a 3.4mm-diameter circle on the optic disc.

Thickness Map (RNFL)

Thicker regions are displayed as yellow, orange and red, whereas thinner regions are displayed as blue and green.

Shadowgram

Surface photograph of the assembled OCT B scans.

Red-free Fundus Image (Digital)

Red-free image will more assist in detecting RNFL thinning.

**Average Thickness** 

Total/Superior/Inferior thickness value appears.

6 RNFL Circular Tomogram

Pseudo Color / Gray / Inverted Gray tomogram can be displayed.

RNFL Thickness Graph

The RNFL thickness data can be divided into 4, 16, 36 regions.

Optic Disc Analysis & R/D Ratio

Structure of an optic nerve head and its nerve head cupping can be understood by specific parameters.