# SOCT Copernicus<sup>+</sup> Specification

Technology	Spectral Domain OCT
Measurement Mode	Single B-Scan, 3D, Asterisk, Animation Scan, user defined scan parameters
Fixation	Internal and external fixations
Light Source Wavelength	830 nm, 50 nm half bandwidth
Axial Resolution	5 μm
Transversal Resolution	12-18 µm
Axial Scanning Window	2 mm
Examination Speed	27.000 A-Scans per second
B-Scan width	10 mm
Maximum number of A-Scans per B-Scans:	10.500
Minimum pupil diameter for measurement	3 mm
Analysis	Retina: Retina thickness, Retina volume, RNFL thickness, RNFL volume, RPE deformation, IS/OS thickness Glaucoma: RNFL, ONH morphology, DDLS Anterior: Pachymetry, LASIK flap, Angle Assesment, AIOP
Dimensions	640 x 680 x 520 H x W x D
Voltage	230 V, 50 Hz / 115 V, 60 Hz







Local Distributor:

OPTOPOL Technology S.A. ul. Zabia 42, 42-400 Zawiercie, POLAND Tel/Fax: +48 32 6709173 info@optopol.com.pl



# SOCT Copernicus<sup>+</sup>

SOCT Copernicus<sup>+</sup> system operates with a scanning speed of 27,000 A scans per second and a resolution of 5  $\mu$ m.

Improved quality of tomograms, faster work flow with fantastic easiness of use make our device very competitive and interesting solution for modern ophthalmologists and optometrists.



#### Features

- » Scanning speed 27000 A-scan per sec
- » Ergonomic shape and easiness of use
- » Scanning modes vitrous and choroid
- » Correlation of examinations using veins shape
- » Server solution

- » Anterior Module (pachymetry, TISA, AOD measurements)
- » Fast work flow
- » Advance comparison module
- » Burning reports on the CD/DVD

# SOCT Copernicus<sup>+</sup> Glaucoma Module

A Powerful Predictor of Change

- » Validated by ophthalmologists to predict structural change
- » Optic disc analysis outperforms expert interpretation
- » Large normative database
- » Progression analysis
- » Symmetry analysis
- » Network ready
- » Pachymetry
- » Angle assessment

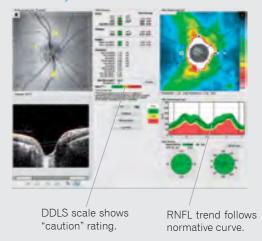
The SOCT Copernicus<sup>+</sup> Glaucoma Module is an essential tool for the detection and management of Glaucoma. Essentially, the tool allows detection on pupillary defect and tracks progression with time. The essential components of the Glaucoma Module are:

# » Disk Damage Likelihood Scale (DDLS)

The DDLS is a new way to analyze the optic nerve. Instead of a cup/disc (c/d) ratio, a rim/disc (r/d) ratio and the nerve size is measured. This methodology is superior than any other reporting measure for two reasons:

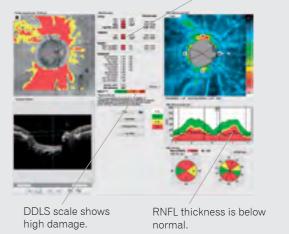
- a. DDLS eliminates the effects of disc size, which is so variable in people.
- b. DDLS measure provides more weightage to the rim, which is the actual part that is damaged in Glaucoma.

# Healthy Disc



## Glaucomatous Disc

Disc Morphology Quantification



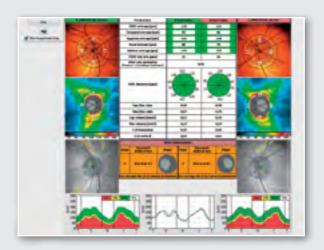
## » Symmetry Analysis

Correctly identifies patients with glaucomatous field loss and shows abnormalities in many patients considered at high risk for glaucoma who still have normal fields. Asymmetry analysis is also able to identify objectively the extent of glaucomatous damage and detects changes before subjective field lossoccurs.

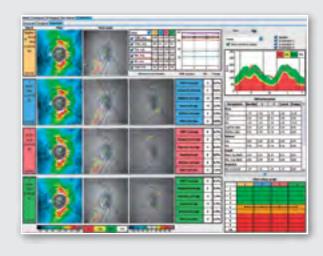
#### » Progression Analysis

Glaucoma module allows complete and detailed progression analysis of the RNFL thickness, comparison to the normal population, DDLS scale and difference from baseline plots to highlight progression and/or comparison of disc scans at various stages of time.

# Symetry Analysis

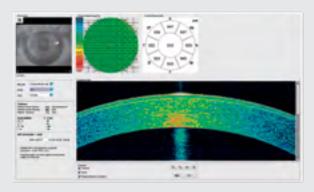


# Progression Analysis



# Anterior Segment Module

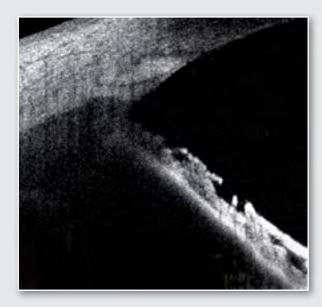
The anterior segment module allows cornea and anterior imaging with a resolution of 5 micron.



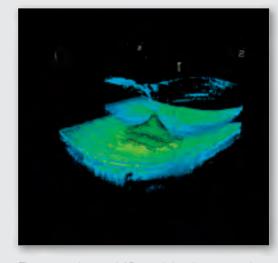
#### SOCT Copernicus+ software allows:

- 1. Pachymetry map
- 2. Epithelium thickness measurement
- 3. AOD, TISA
- 4. LASIK Flap
- 5. Anterior lens measurement
- 6. IOP correction

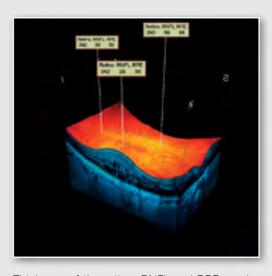




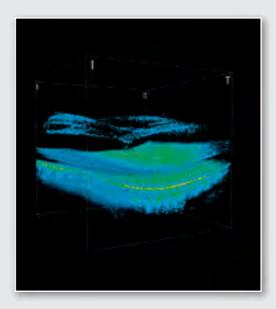
## 3D and Fovea



The new advanced 3D module allows visualiation of the 3D reconstruction. Peeling facilitates localization and review of the pathology for detailed analyzis.



Thickness of the retina, RNFL and RPE can be seen for any spot on the 3D picture - enabling quick and easy study of the structures.



Vitreomacular tractions can be vislualized, highlighted and removed for easy patient understanding.

# Progression Module

Wide range of comprehensive tools in SOCT Copernicus<sup>+</sup> progression module allows doctors to observe pathology progression during follow up visits.

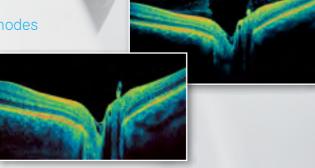
# New blood vessels recognition system



High reliability and repeatability thanks to our new blood vessels recognition system. This system allows excellent accuracy in scans overlay.

# Chorioretinal and Vitreoretinal scanning modes

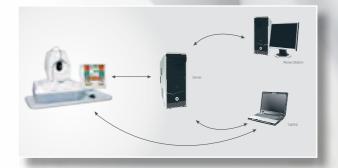
Depending on exam requirements SOCT Copernicus<sup>+</sup> software gives you an option to highlight structural changes and to make them more visible in the relevant part of the retina.



# One Click – fast and easy examination

Examination Module has been redesigned, now taking an exam is much easier and faster than ever before. With just one click of your mouse system tracks retina and is ready for data acquisition.

# Network Solutions



SOCT images can be stored in the central location and be accessible from viewing stations located in many different places. There is no additional charge for the server module.

- » Normative Database
- » Powerful tool for exam reports preparation
- » New tools for anterior angle assessment

# SOCT Copernicus<sup>+</sup> Image

