

optovue solix

Next generation  
imaging from cornea  
to choroid. With  
FullRange<sup>®</sup> technology.





# Enhanced reporting helps you save sight

SOLIX features ultra-high-speed scanning for a FullRange field of view. It manages to be wide and deep, without sacrificing image clarity or resolution.

SOLIX is a new technology built upon a proven foundation of high-speed Spectral Domain OCT. This FullRange platform empowers practitioners to identify and manage numerous pathologies from the front of the eye to the back for a vastly superior diagnostic experience. SOLIX delivers multiple tools for a new generation of disease management that improve throughput and enable superior patient care:

- FullRange anterior segment imaging to capture the entire anterior chamber in a single scan
- External IR imaging to enable evaluation of Meibomian glands of the upper and lower lids without a dedicated imaging device
- Proven glaucoma analytics that combine structural and vascular images and measurements
- FullRange retinal imaging that allows wide and deep imaging of the retina, choroid and vitreous...even in highly myopic patients
- Optovue's industry-leading AngioVue® OCT Angiography (OCTA) for non-invasive 3D visualization and quantification of retinal vasculature\*
- Fundus and external color photography
- Wellness capabilities that have become part of a new standard of care for patients suspected of both retinal pathologies and glaucoma
- Ultra-fast spectral-domain technology produces a wide and deep field of view that does not compromise image resolution
- Multi-volume merge averages four scan volumes to deliver high-density images with pristine clarity
- 3D vessel rendering enables real-life visualization of retinal vasculature and vascular connectivity
- 3D PAR 2.0 rapidly removes the majority of projection artifact from the deep plexus to simplify image interpretation and produce more reliable quantification
- New segmentation algorithms dramatically improve Bruch's membrane and RPE segmentation for more confident assessment - even in highly diseased eyes
- DualTrac™ Motion Correction Technology with enhanced visualization combines real-time tracking and patented post-processing to enable true 3D correction of distortion in all directions for ultra-precise motion correction

\*Optional feature

Optovue extends sincere appreciation to Adil El Maftouhi OD (Centre Rabelais, Lyon, France) for the use of his images throughout this brochure. Unless noted, all images are courtesy of Adil El Maftouhi.

# Anterior segment

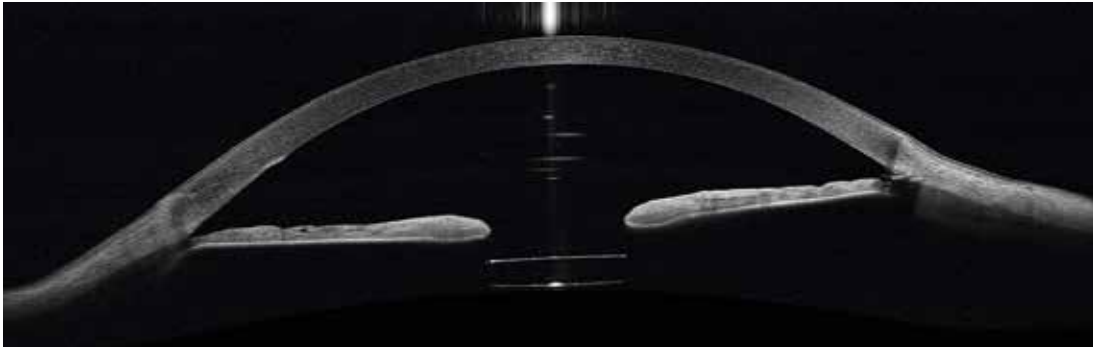
SOLIX FullRange anterior imaging provides stunning views of the entire anterior chamber, from the front surface of the cornea to the anterior surface of the lens. A comprehensive anterior segment package expands the clinical utility of the system to address a broad range of patients.

## FULLRANGE ANTERIOR SEGMENT

Image the entire anterior chamber with the FullRange 18x6.25mm scan and use the caliper tools to measure ocular structures.

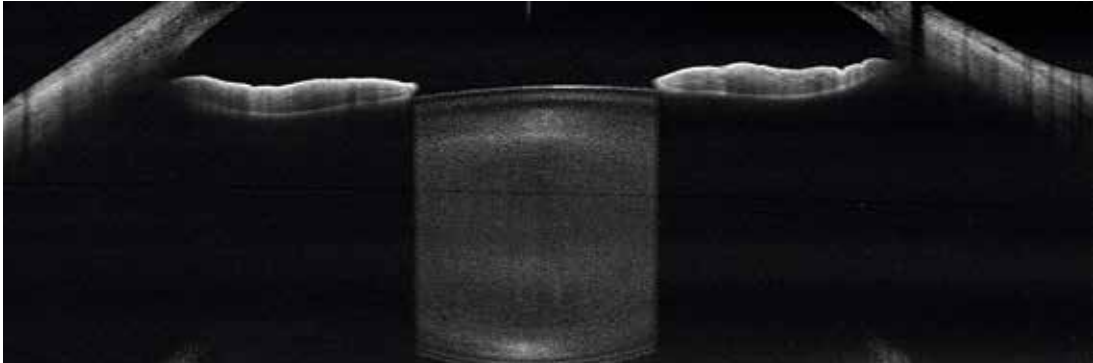


## REFRACTIVE



Visualize and measure placement of implantable contact lenses.

## CATARACT

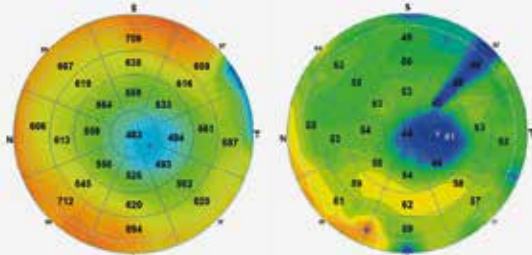


Shift the scan depth to evaluate opacities and measure the size of the lens prior to cataract surgery.

## CORNEAL AND EPITHELIAL THICKNESS MAPPING

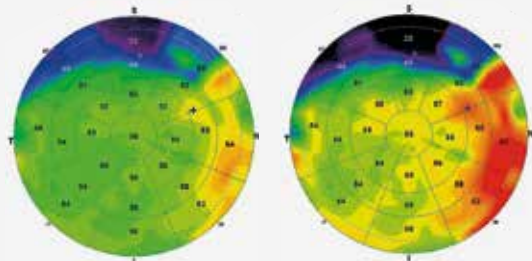
### 10mm Corneal Layer Map

Quantify epithelial, stromal and total corneal thickness with the 10mm Corneal Layer Map, which features 16 meridians to fully cover the LRS transition zone. Use the Highlight Tool to further appreciate subtle changes in thickness. The Change Analysis report measures changes in thickness between visits.



Pachymetry

Epithelial Thickness Map



Epithelial Thickness Map with and without ETM Highlight Tool

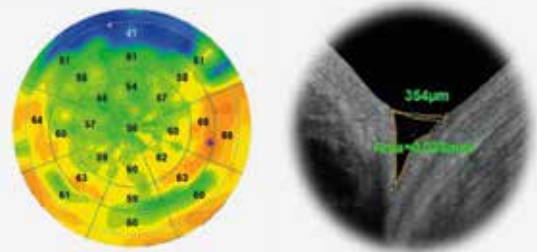
### External IR imaging

Evaluate Meibomian gland structure of the upper and lower lids.



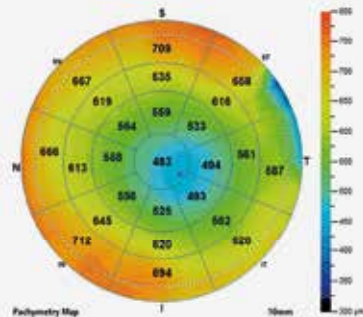
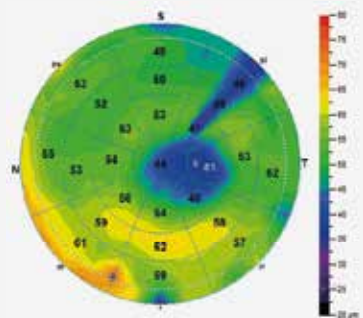
## DRY EYE

Add new information to the diagnosis and management of dry eye patients.



## KERATOCONUS

Measure epithelial, stromal and total corneal thickness to aid in disease diagnosis. Pachymetric measurements can be compared to the Coollabs Keratoconus Risk Scoring System to further enhance diagnostic accuracy.



Coollabs Keratoconus Risk Scoring System:  
<http://www.coollab.net/resources>

# Glaucoma

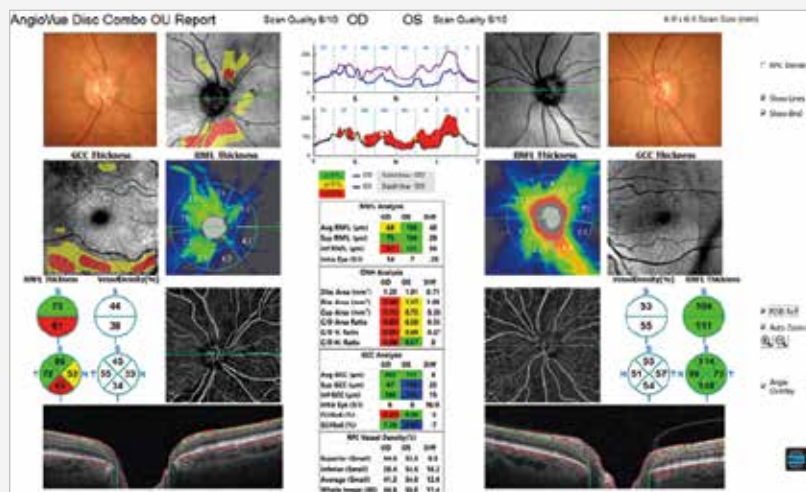
The SOLIX glaucoma package delivers in-depth analysis of the optic nerve head structure and vasculature. Optovue-exclusive data points bring additional insights that aid in clinical decision making.

A single scan protocol with Motion Correction Technology (MCT) generates both OCT and OCTA images with AngioAnalytics® metrics to optimize efficiency and help you quickly understand each patient's rate of change.

## OPTIC DISC ANALYSIS

### Disc Combo Report

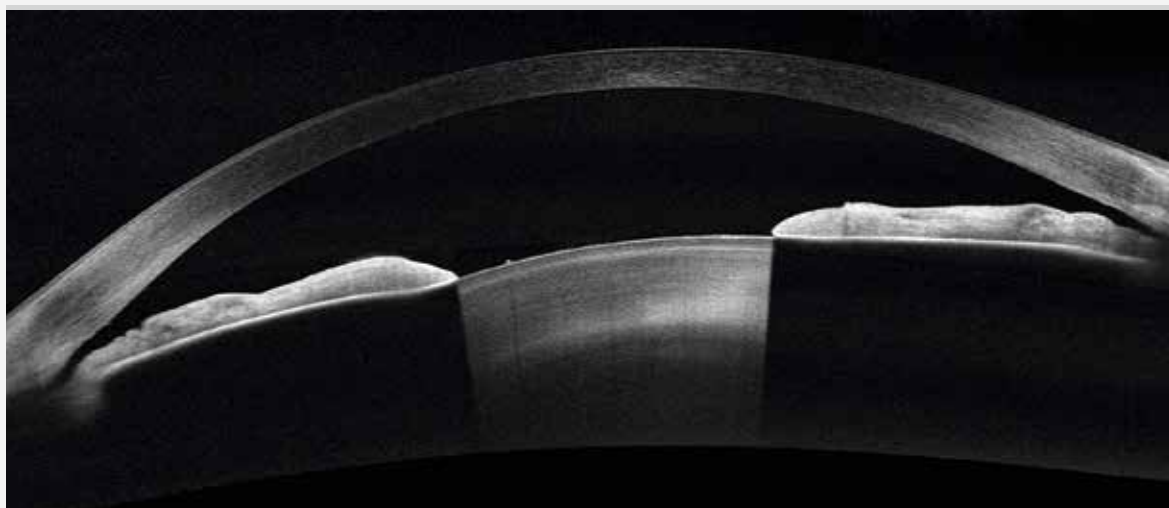
Enhance glaucoma diagnosis and management with a single scan protocol showing optic nerve head parameters, RNFL and GCC thickness with comparison to a reference database of normal subjects, radial peripapillary capillary (RPC) vasculature and RPC density.



## ANTERIOR CHAMBER ANALYSIS

### FullRange Anterior Chamber Scan

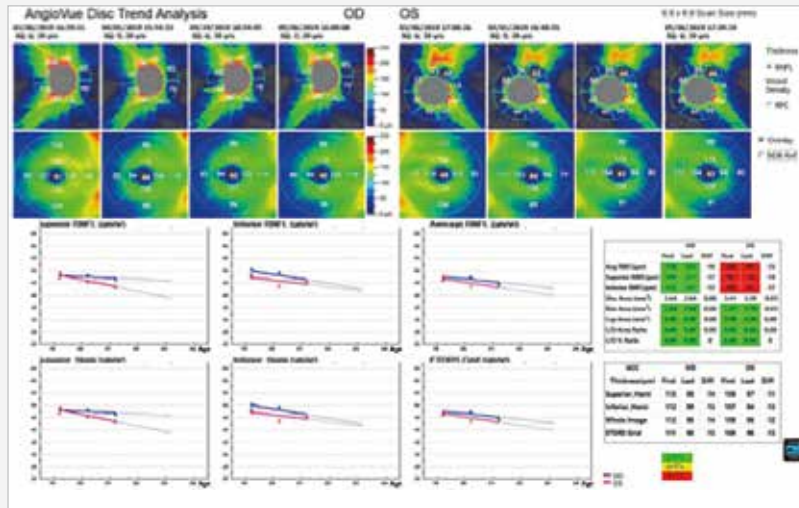
Visualize and measure anterior chamber structures in angle closure glaucoma, pupil block glaucoma and glaucoma shunt placement with a single scan.



## TREND ANALYSIS

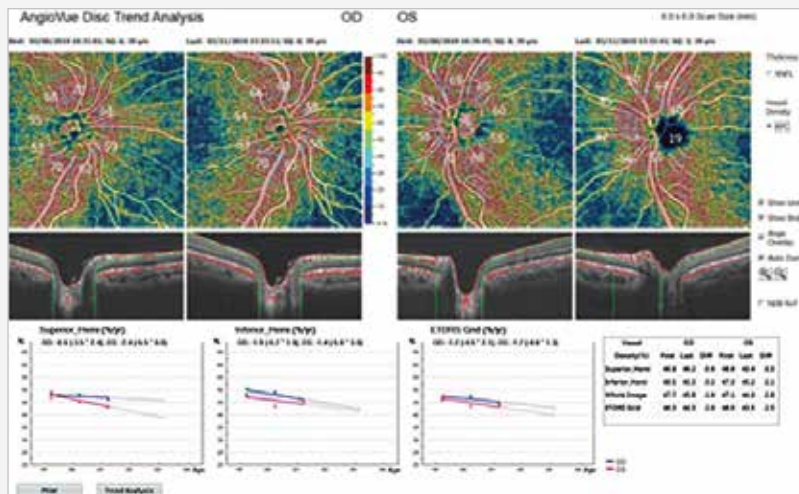
### ONH + GCC Trend Analysis Report

Track change and estimate the rate of change in both GCC and RNFL thickness with unparalleled reproducibility to easily assess how quickly a patient’s disease is progressing.



### AngioDisc Trend Analysis Report

Measure the vessel density of the RPCs, assess visit-to-visit change, and estimate rate of change in glaucoma patients and suspects. Vessel density analysis complements RNFL and GCC analysis and aids in the management of advanced glaucoma – especially in cases where neural structural measurements have reached the measurement floor.



### Focal Loss Volume & Global Loss Volume

Optovue’s exclusive Focal Loss Volume (FLV%) and Global Loss Volume (GLV%) provide valuable data points to aid in the prediction of visual field conversion in glaucoma suspects<sup>1</sup> and progression in glaucoma patients<sup>2</sup>.

1. Zhang X, Loewen N, Tan O, Greenfield D, Schuman J, Varma R, Huang D. Predicting Development of Glaucomatous Visual Field Conversion Using Baseline Fourier-Domain Optical Coherence Tomography. Am J Ophthalmol. 2016 Mar; 163:29-37.
2. Zhang X, Dastiridou A, Francis BA, et al. Comparison of glaucoma progression detection by optical coherence tomography and visual field. Am J Ophthalmol. 2017; 184: 63- 74.

# Retina

SOLIX delivers pristine images of retinal structures with unprecedented views of the vitreous and choroid, enabling confident diagnosis and management of retinal pathologies – even in highly myopic patients.

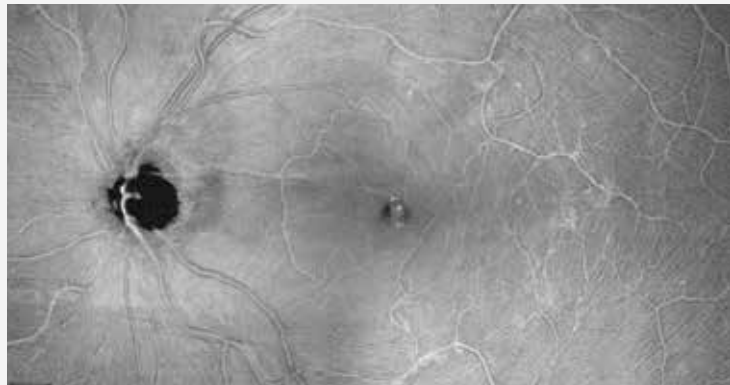
A single scan protocol with MCT generates all the necessary images and data needed for comprehensive retinal analysis, which optimizes efficiency and quickly provides the clinical data your practice demands.

## EN FACE OCT

### DualMontage

Combine two 9x9 scans for a seamless view of the posterior pole.

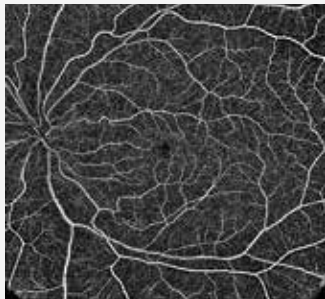
Image courtesy of Alexandra Miere MD, Creteil University Hospital, France



## ANGIOVUE OCTA

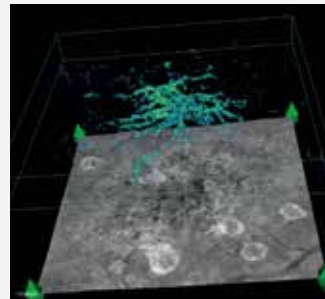
### QuadMontage

AngioVue QuadMontage combines four 9x9mm scans for widefield visualization of the peripheral retina.



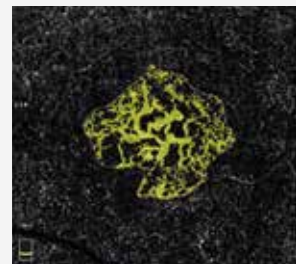
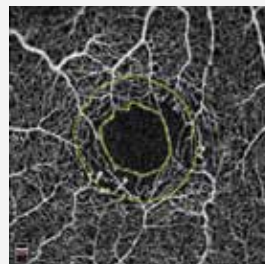
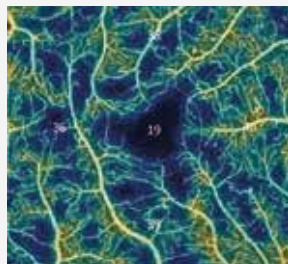
### 3D OCTA

Optovue's exclusive 3D OCTA rendering enables real-life visualization of retinal vasculature and vascular connectivity.



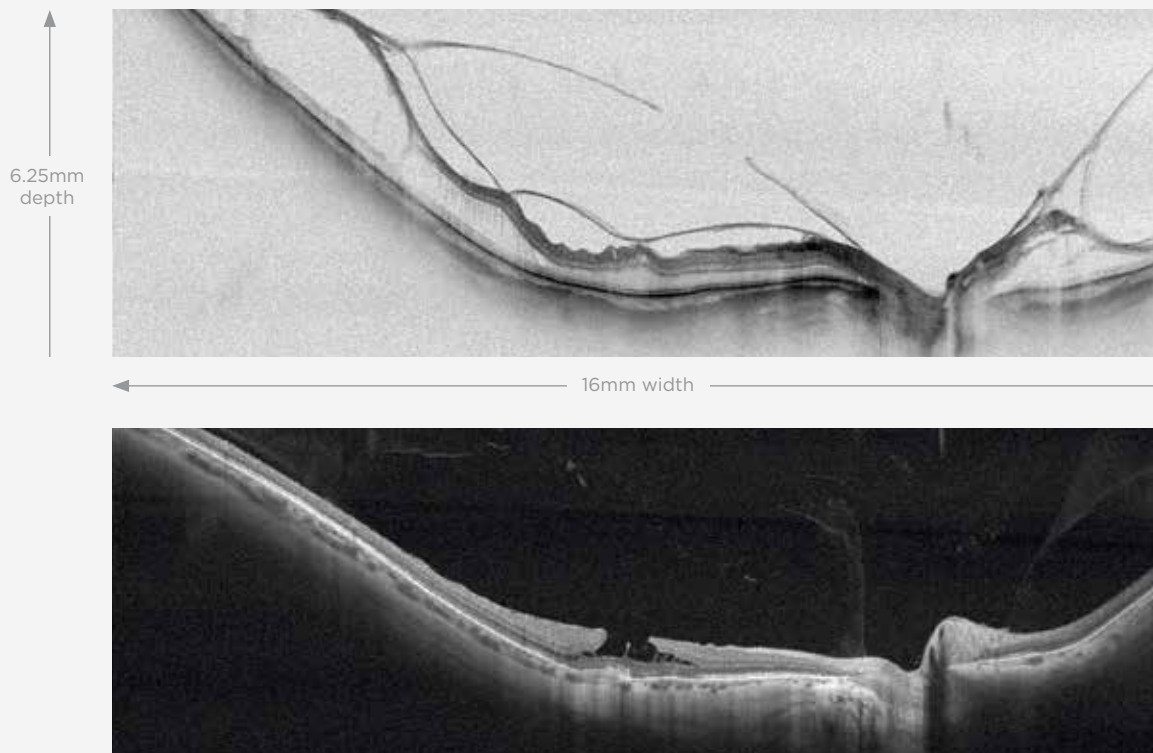
### AngioAnalytics™ OCTA Metrics

Vessel Density Mapping, FAZ Analysis, Flow Area Measurements





## FULLRANGE RETINA



Expand diagnostic capabilities with an ultra-fast, deep, and wide line scan.

## THICKNESS MAPS

Measure retinal thickness and GCC thickness maps and compare to a reference database.



## FUNDUS PHOTOGRAPHY

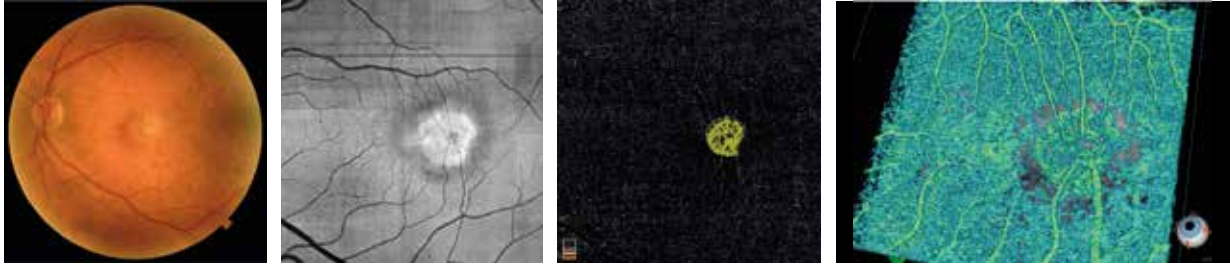
View retinal photos in color, grayscale and inverse modes.



# Retina

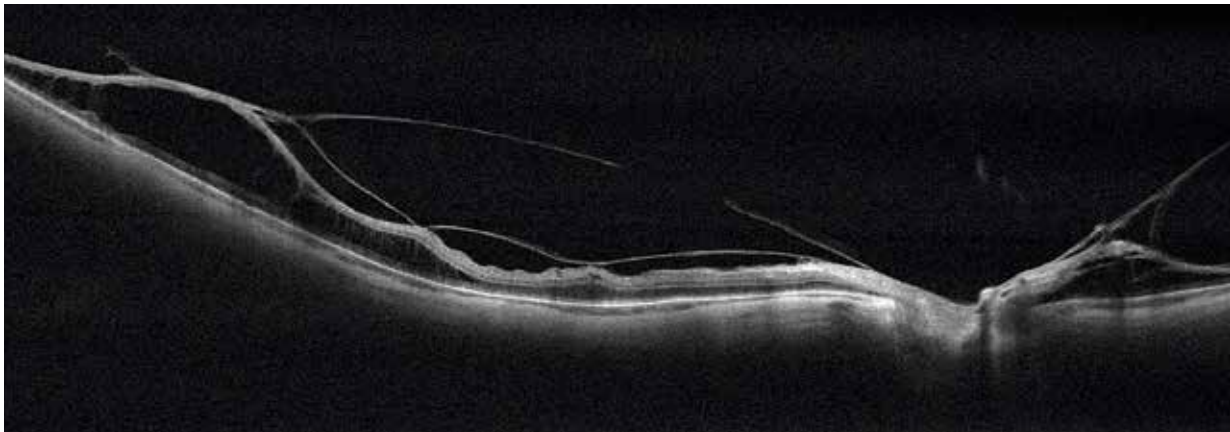
## MACULAR TELANGIECTASIA WITH TYPE 3 NEOVASCULARIZATION

- Fundus Photo
- En Face OCT of the Outer Retina 6.4x6.4mm
- AngioVue OCTA of the Outer Retina with Flow Area Measurements
- AngioVue 3D OCTA



## POSTERIOR VITREOUS DETACHMENT WITH EPIRETINAL MEMBRANE

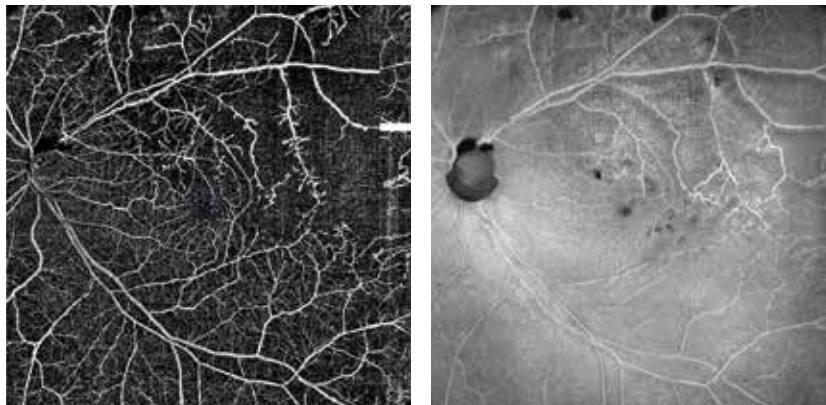
- FullRange Retina Scan



Images courtesy of Explore Vision Clinic, Paris, France

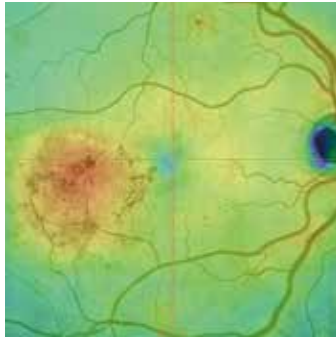
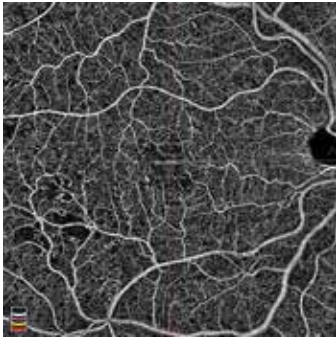
## VEIN OCCLUSION

- AngioVue OCTA of the Superficial Retina 12x12mm
- En Face OCT of the Superficial Retina 12x12mm



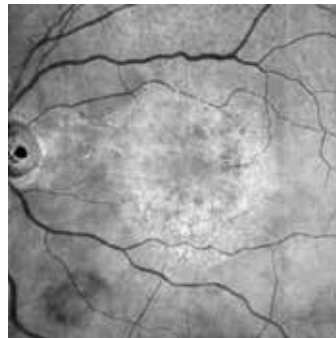
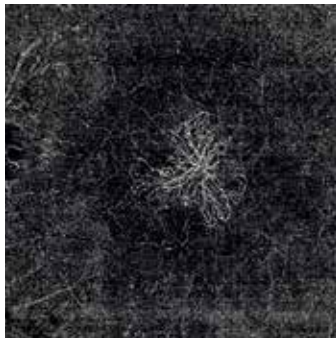
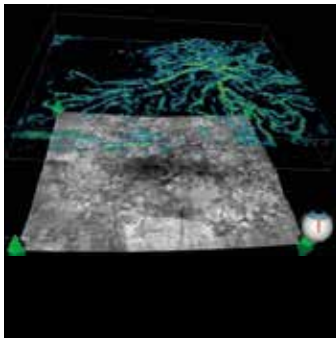
## DIABETIC RETINOPATHY

- AngioVue OCTA of the Superficial Retina 9x9mm
- Retinal Thickness Map 9x9mm
- Raster Scan



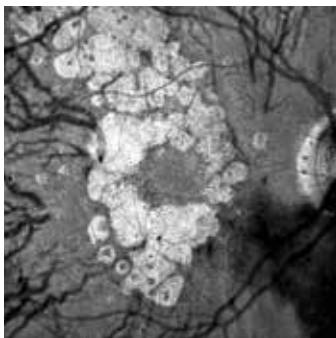
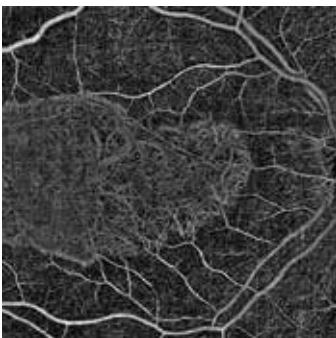
## TYPE 1 CHOROIDAL NEOVASCULARIZATION

- AngioVue 3D OCTA
- AngioVue OCTA of the Outer Retina 9x9mm
- En Face OCT of the Outer Retina 9x9mm



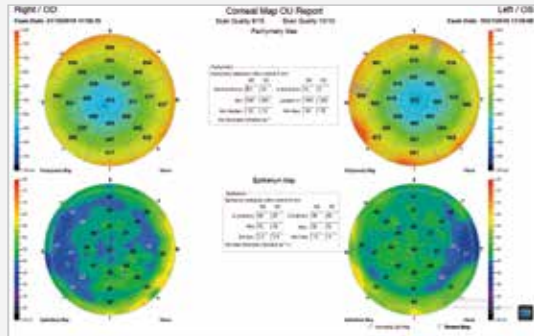
## GEOGRAPHIC ATROPHY

- AngioVue OCTA of the Superficial Retina 9x9mm
- En Face OCT of the Superficial Retina 9x9mm
- Fundus Photo

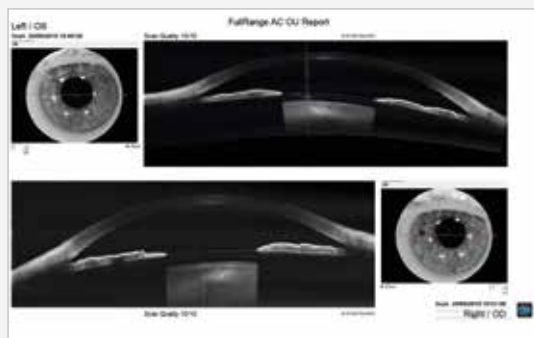


# Solix reports

## ANTERIOR SEGMENT



Cornea Layer Map: Single Eye, OU and Change Analysis Reports



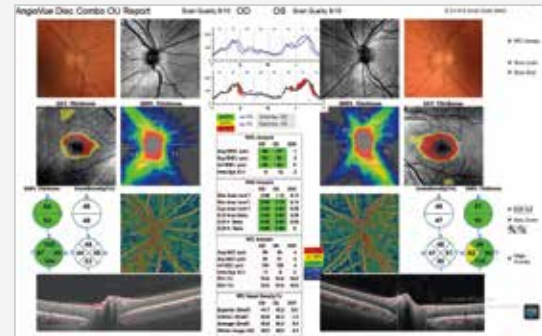
FullRange AC: Single Eye and OU Reports



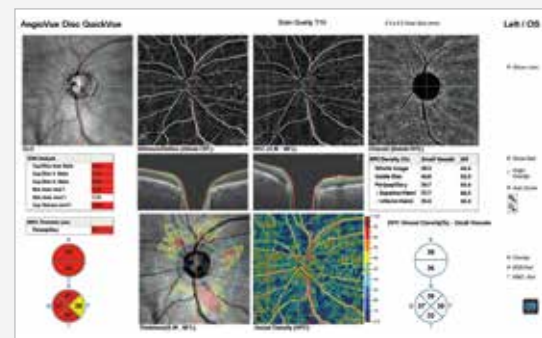
External Photography

Image courtesy of Julie Rodman, OD, MS, FAAO, Ft. Lauderdale, USA

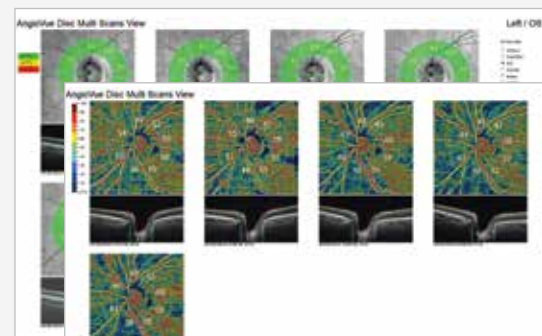
## GLAUCOMA



Disc Combo Report

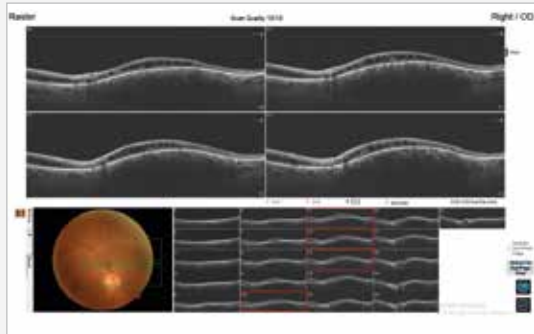


AngioVue Disc QuickVue

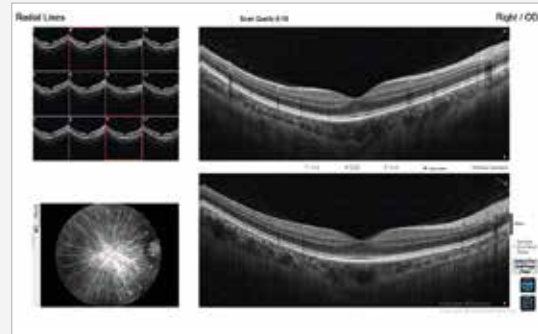


AngioVue Disc OU Trend Analysis and Multi-Visit View

## RETINA REPORTS



Raster



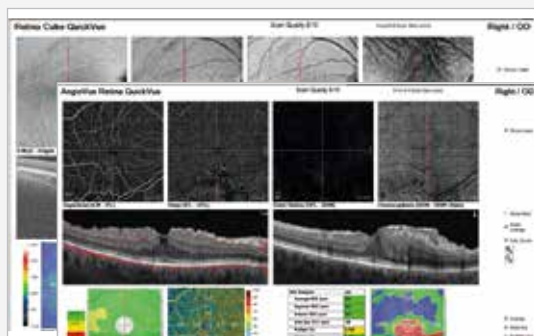
Radial



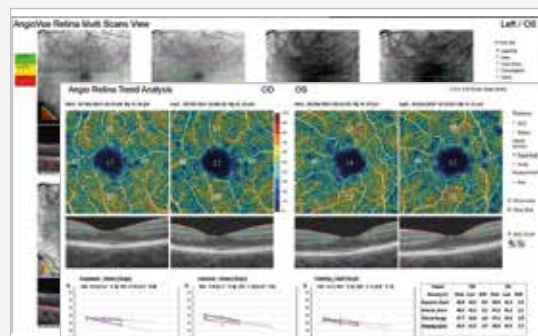
FullRange Retina Report



Fundus Photo



Retina Cube QuickVue and  
AngioVue Retina QuickVue

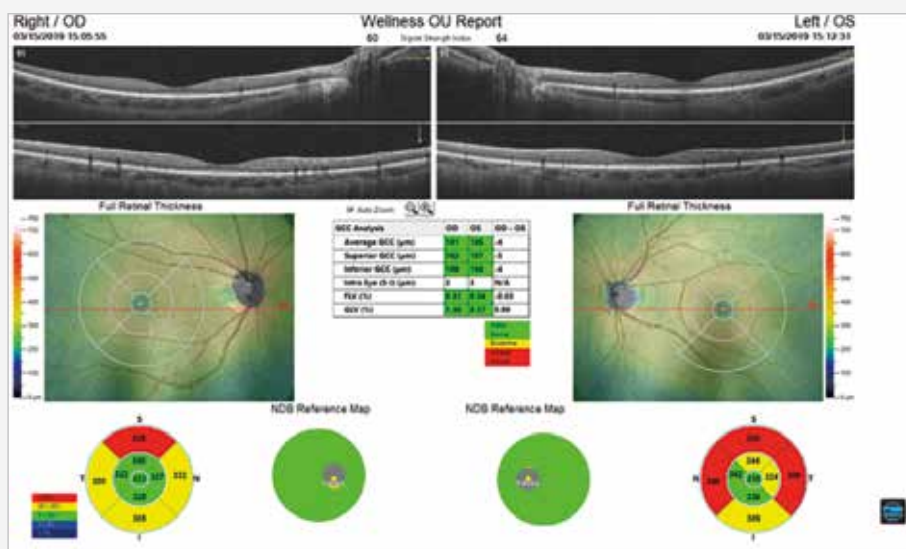


AngioVue Retina Trend Analysis  
and Multi-Visit View

# OCT Wellness protocol

The SOLIX wellness protocol can reveal the need for more extensive imaging, as well as streamline the exam process, both by quickly confirming normal function and by aiding in more efficient diagnosis of pathology. In addition, wellness programs improve patient involvement and retention for practice differentiation and growth.

OCT wellness generates a single, comprehensive report to promote better overall eye health. The report includes a 12x9mm structural scan that optimizes metrics on retinal thickness and ganglion cell thickness to the superior/inferior arches. High-resolution B-scans provide excellent visualization of retinal structures.



# Technical specifications

The Solix platform is available in two configurations that are easily upgradeable, so your OCT system meets the needs of your practice today and into the future.

## SOLIX CONFIGURATIONS

- **Solix FullRange OCT with AngioVue Expert**      Posterior and Anterior OCT Imaging with Fully-Featured OCTA

## SOLIX TECHNICAL SPECIFICATIONS

### OCT Imaging | Retina

Scan Speed	120,000
Axial Resolution	5µm (in tissue)
Lateral Resolution	15µm (in tissue)
Transverse Resolution	15µm (in tissue)
Scan Depth	Up to 3 mm (regular mode)
Scan Width	Up to 6.25mm (FullRange mode) 3mm – 16mm
Dioptric Range	-15D to +15D
Pupil Size	≥ 2.0 mm

### OCTA Imaging

Retina Scan Sizes	3x3mm, 6.4x6.4mm, 9x9mm and 12x12mm
Disc Scan Size	6x6mm
AngioVue Montage	Two 9x9mm scans, four 9x9mm scans

### OCT Imaging | Anterior Segment

Lateral Resolution	18µm (Regular CAM) (in tissue) 36µm (FullRange CAM) (in tissue)
Scan Depth	Up to 3 mm (regular lens) Up to 6.25mm (FullRange lens)
Scan Length	2mm - 18mm

### Fundus Photography

Resolution	5MP
Scan Mode	Color, red-free*
Field of View	45° and 35° (small pupil mode)
Dioptric Range	-35D to +30D
Pupil Size	≥ 4.0 mm; ≥ 3.3 mm (small pupil mode)

### External Photography

External Photograph	Color (white light flash)
External Infra-Red (IR) Image	IR (940nm illumination)

### Electrical and Physical Specifications

Weight	95 kg (210 lbs)
Instrument Dimensions	1072mm X 600mm x 610mm (W 39.4 x D 31.5 x H 59 inches)
Table Dimensions	952mm x 600mm x 913mm (W 36.2 x D 23.6 x H 35.9 inches)
Fixation	External and 13-point internal
Electrical Rating	AC 100V-240V

### Computer/Networking Specifications

Operating System	Windows 10
CPU	Intel Core i7-8700 processor or above
RAM	32GB DDR4 or more
Hard Drive	Solid state drive 256GB for operating system Main drive 4TB Back-up drive 4TB
DICOM	DICOM MWL, DICOM storage
Networking	NetVue Pro Review Software - Up to 10 Workstations

\*Color image is processed and then displayed as a pseudo red-free image.



INNOVATION TO UNLOCK YOUR POTENTIAL

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