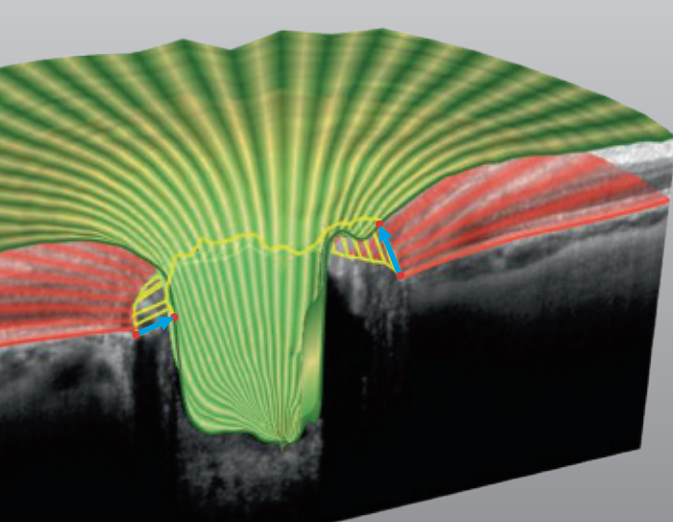


Glaucoma Module Premium Edition



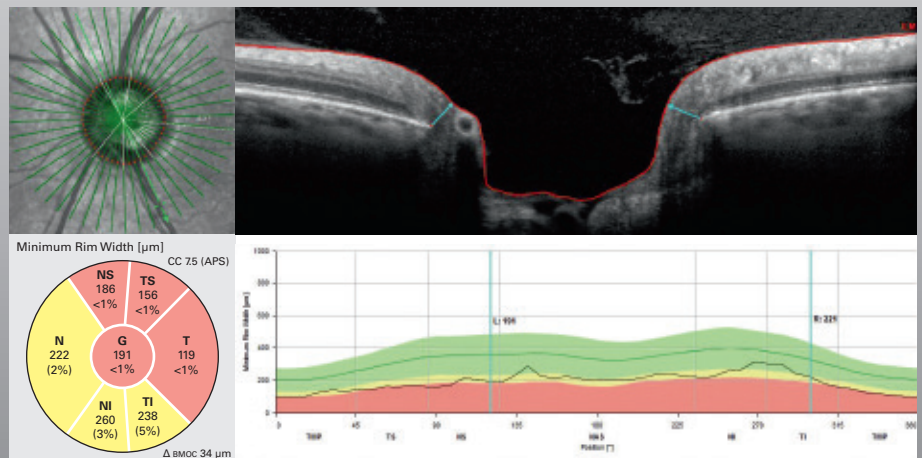
The SPECTRALIS OCT Glaucoma Module Premium Edition provides a new, objective method of optic nerve head (ONH) analysis using Bruch's membrane opening (BMO) as the anatomical border of the rim.

Neuroretinal rim assessment is performed from the BMO to the nearest point on the internal limiting membrane (ILM)^{1,2}. This shortest distance measurement is referred to as BMO-based minimum rim width (BMO-MRW). The new BMO-MRW parameter takes into account the varying trajectory of nerve fiber axons as they exit the eye, thereby providing anatomically accurate results.

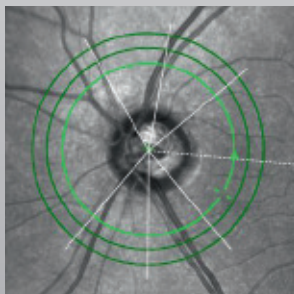
¹ Povazay et al. J Biomed Opt. 2007;12:041204.
² Chen TC. Trans Am Ophthalmol Soc. 2009;107:254-281.

ONH Rim Analysis

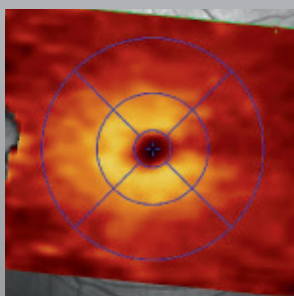
A BMO-centered 24-line high resolution radial scan is acquired to provide measurements of the ONH. An automated detection of BMO and ILM at all 48 data points around the ONH allows for precise analysis of the neuroretinal rim. The results are compared to a normative database and presented in a Garway-Heath sector format to allow for better structure and function correlation. Comparison to normative data is facilitated by presentation of percentiles.



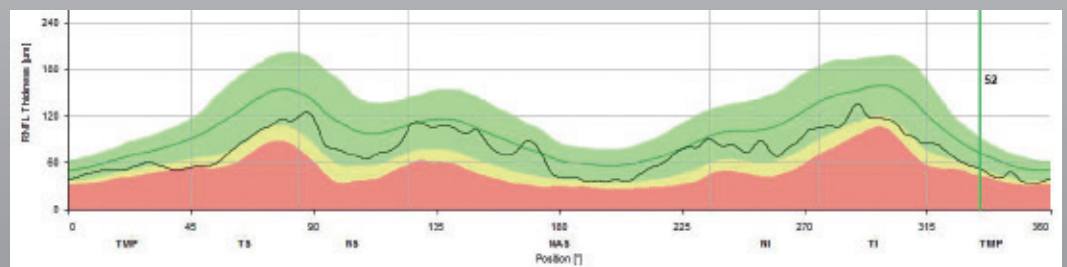
Comprehensive Analysis



Three circle scans automatically centered on the BMO-demarcated optic nerve head are acquired to provide highly reproducible retinal nerve fiber layer thickness results. These thickness values are compared to a normative database that adjusts for both the BMO size and age. The Garway-Heath sector format allows for better correlation of RNFL thickness values to functional measurements.



The multi-layer segmentation software allows for assessment of the isolated ganglion cell layer (GCL). These results allow for a thorough assessment of the macula region via a GCL thickness map.



Anatomic Positioning System (APS) – A concept for the present and the future

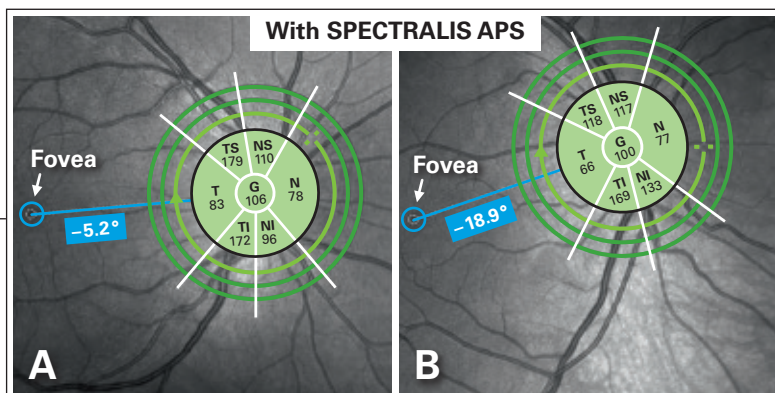
Only the SPECTRALIS OCT family of products offers the unique Anatomic Positioning System (APS). APS is a navigational system like GPS, that is based on points in the eye using two fixed, structural landmarks: the center of the fovea and the center of the Bruch's Membrane Opening (BMO). These landmarks are defined during the initial APS scan. The exclusive SPECTRALIS APS aligns scans automatically relative to the patient's individual Fovea-to-Bruch's Membrane Opening Center (FoBMOC) axis and thereby ensures consistent, accurate placement of subsequent scans and sectors for data analysis.

With SPECTRALIS APS

OCT scans are adjusted according to the unique FoBMOC axis of the eye, thereby providing highly repeatable sectorial results.

Anatomic Positioning System (APS):

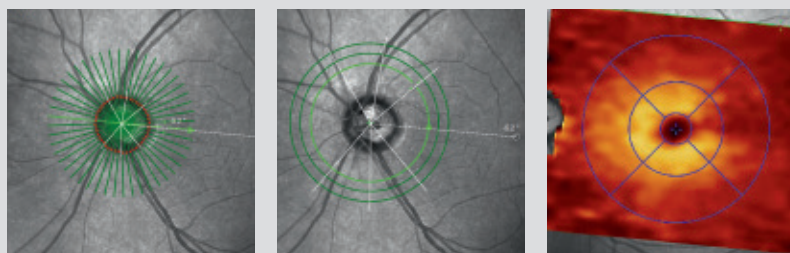
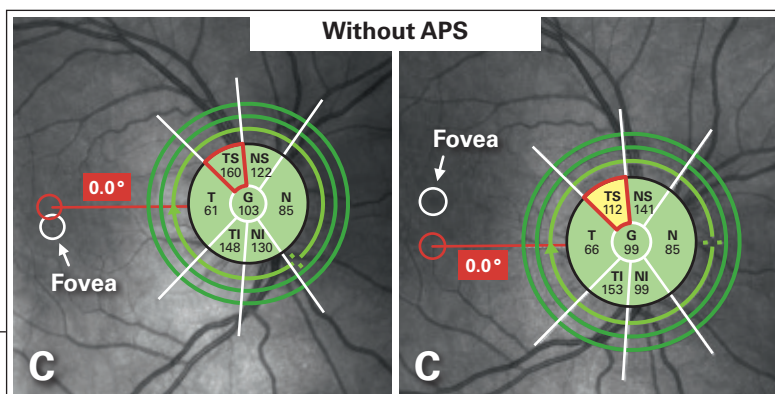
Two eyes with different anatomical positions of the fovea relative to the center of the ONH (A and B). SPECTRALIS OCT scan orientation automatically aligned along the individual's FoBMOC axis.



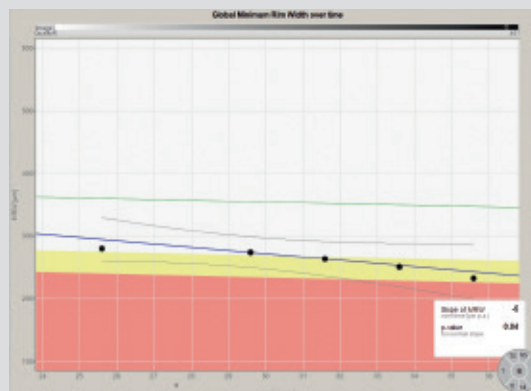
Without APS

OCT scans are not adjusted according to the unique FoBMOC axis of the eye and not compensated for head tilt, thereby providing highly variable sectorial results.

Same eye scanned on separate visits (C: without APS and AutoRescan):
Head tilt causes significant variability of classification results.



APS-linked unique scan patterns provide ONH, RNFL, and ganglion cell thickness parameters. All parameters take into account the unique FoBMOC axis of individual eyes, providing accurate sectorial analysis along with a precise progression analysis.



**HEIDELBERG
ENGINEERING**

www.HeidelbergEngineering.com

Headquarters
Heidelberg Engineering GmbH
Tiergartenstr. 15
69121 Heidelberg · Germany
Tel. +49 6221 6463-0

AUS
Heidelberg Engineering Pty Ltd
404 Albert St.
East Melbourne 3002 · Victoria
Tel. +61 396 392 125

UK
Heidelberg Engineering Ltd.
55 Marlowes
Hemel Hempstead
Hertfordshire HP1 1LE
Tel: +44 1442-502 330

USA
Heidelberg Engineering, Inc.
1808 Aston Avenue, Suite 130
Carlsbad, CA 92008
Tel. +1 760-536-7000