CIRRUS HD-OCT
Certainty at the speed of CIRRUS
The moment a subtle change in pathology becomes a turning point in care. 
This is the moment we work for.
Build your success.
Elevate your effectiveness.
Performance at the speed of CIRRUS.

Rapid development over the last 10 years has made eye care more complex, comprehensive and challenging than ever before.

Powerful changes in demographics and trends in eye care are putting unprecedented demands on practices to keep pace, perform at the highest level and deliver better outcomes faster, to more and more patients.

The CIRRUS HD-OCT 5000 and 500 enable eye care practices of all types to stay ahead of current and future challenges without compromise. CIRRUS delivers a carefully constructed set of sophisticated clinical applications that build one upon another to address rapidly-evolving requirements for diagnostics and disease management in retina, glaucoma and anterior segment populations. From broad comprehensive to advanced subspecialty practice, there’s a CIRRUS designed for you.

Begin with a foundation of data and insight

The Carl Zeiss heritage of brilliant optics pervades all aspects of the CIRRUS experience, providing visualizations that are at once informative and inspiring as you view targeted tissue from multiple perspectives. In just seconds, CIRRUS creates a tightly-layered, insight-rich, multi-dimensional cube of data that allows you to visualize and analyze the vital dynamics of each patient’s changing condition.

<table>
<thead>
<tr>
<th>Cube Scan Pattern</th>
<th>Total Data Points</th>
<th>Spacing Between Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>512 x 128</td>
<td>&gt;67 million</td>
<td>47µm</td>
</tr>
<tr>
<td>200 x 200</td>
<td>&gt;40 million</td>
<td>30µm</td>
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Clinical decisions at the speed of CIRRUS

Data is only the beginning

More than a single tool, CIRRUS delivers both exceptional visualization and precise measurement applications, each one a necessary building block in generating efficient, effective outcomes for your patients. Ultimately, the CIRRUS HD-OCT 5000 and 500 allow you to discover, track and analyze single pathological events from multiple points of view for greater CERTAINTY regarding your next important step in treatment.

Brilliant visualizations

**Examine Retinal Details**
Selective Pixel Profiling™ optimizes each illumination point in the 20 X HD Raster Scan, ensuring detail-rich visualizations that spotlight critical pathological elements.

**Gain Deeper Insight**
New Enhanced Depth Imaging focuses the signal lower in the scan window for assessment of the deeper choroidal tissue.

**Visualize Change**
New FastTrac™ on the CIRRUS HD-OCT 5000 precisely targets and captures the same tissue every time to ensure consistent comparison.

Insightful analyses

**Reproducible Analyses**
ZEISS proprietary algorithms measure and display layers for unsurpassed tissue targeting, segmentation, and reproducible measurements.

**Comparative References**
Diversified normative databases of ONH, RNFL, ganglion cell/IRL, and macular thickness facilitate at-a-glance identification of anatomy outside normal limits.

**Change Measurements**
All CIRRUS data cubes are automatically registered with historical data, allowing for point-to-point measurements of change.
Age-Related Macular Degeneration

Diabetic Retinopathy
Glaucoma

HD 5 Line Raster

RNFL Layer Deviation Map

Ganglion Cell + IP Layer Map

Epiretinal Membrane

HD Raster

ILM Segmentation Map

Macular Thickness Map

LSO Fundus Image with ILM Slab

Advanced Visualization™ with ILM Slab

3D Visualization
Analyzing a single pathology from multiple views provides comprehensive insight and analysis of the clinical situation. By providing multiple spacial views alongside time-based historic data and normative data comparisons, CIRRUS goes beyond 3-dimensional analysis for greater CERTAINTY in your decision-making.

Visualization at the speed of CIRRUS

Discover the power of the CIRRUS Cube.
Sophisticated applications for effective AND efficient retinal assessment

Accuracy at the speed of CIRRUS

New treatments and techniques are focusing attention in the retina like never before. Today, every eye care professional needs to accurately and efficiently evaluate retinal status. CIRRUS has numerous tools that work together to deliver a comprehensive assessment of your patient’s retinal condition.

Superior segmentation
Reveal layer by layer pathophysiology to aid your expert diagnosis.

NEW FastTrac™ retinal tracking system
NEW FastTrac reduces eye motion artifacts without sacrificing patient throughput with a proprietary scan acquisition strategy, high speed 20 Hz LSO camera, and single-pass alignment scanning.

Precision FoveaFinder™
CIRRUS automatically and precisely locates the fovea and centers the ETDRS grid for accurate comparison to normal values.
Tracking change at the speed of CIRRUS

The CIRRUS data cube automatically stores and delivers each patient’s historical data to provide a variety of change assessments, including change maps that help you understand your patient’s response to treatment.

**Measure and visualize macular change**

Because every CIRRUS cube is registered to prior visits, you can measure point-to-point changes in macular thickness. Visualize change at any point in the cube with synchronized b-scan fly-through.

**FastTrac™**

With FastTrac, scan at highest resolution at the same location at each visit.

**Advanced RPE analysis**

New applications allow you to identify and measure RPE disruption associated with drusen, and geographic atrophy. Track area and volume changes and assessment over time.
Premier tools for comprehensive glaucoma management
Assessment at the speed of CIRRUS

CIRRUS provides a comprehensive suite of diagnostic tools that work in concert to enable you to capture and assess the defects and patterns of loss that characterize typical disease progression. Single and combined reports simplify your evaluation process for more rapid decision-making.

**AutoCenter™**
After the scan is acquired, CIRRUS automatically centers the measurement circle around the disc. The placement is not operator-dependent.

**Beyond the circle**
See past circle-based assessments to visualize RNFL damage across the entire peripapillary in the superpixel Deviation Map.

**Optic Nerve Head and RNFL Analysis**
Propriety ZEISS algorithms precisely measure the RNFL thickness and disc parameters including neuroretinal rim while accounting for tilted discs, disruptions to the RPE and other challenging pathologies.

**Ganglion Cell Analysis**
New CIRRUS applications expand your glaucoma tools. Ganglion cell analysis lets you check for early change in the macula that may not be present in the disc region.

The ganglion cell thickness measurements are automatically centered using FoveaFinder™.

Measurements are compared to normative data in superpixel Deviation Maps.

Superior analysis
With high-density cube data and proven segmentation, CIRRUS delivers a diagnostic analysis you can trust for glaucoma assessment.
Manage at the speed of CIRRUS

Understanding the progression of glaucoma is central to managing the disease. CIRRUS HD-OCT GPA™ progression reports let you access and analyze the patient’s complete history in a single view so you can identify trends for more confident patient management.

Guided Progression Analysis (GPA™)
Easy to read graphics allow you to monitor trends and identify location of changes.

Track and compare RNFL thickness and ONH measurements over time to determine if significant change has occurred.

Summary Checkboxes highlight parameters that may show significant change in easy to understand language consistent with HFA™ GPA reports.
Expand your diagnostic capabilities

Insight at the speed of CIRRUS

CIRRUS offers anterior segment imaging of the angle and cornea and the ability to measure central cornea thickness.

**Narrow Angle Visualization**

**Central Corneal Thickness Measurement**

**Keratic Precipitates**

**Microstriae**

**PRK Scar**

**Descemet Detachment**

**IEK Zigzag**

**Bullous Keratopathy with BCL**

**Cataract Incision**
The CIRRUS legacy.
The CIRRUS promise.
The CIRRUS HD-OCT.

Years ago, Carl Zeiss defined OCT with capabilities and applications that launched a new era in eye care. Now, Carl Zeiss is doing it again with the CIRRUS HD-OCT 5000 and 500: foundational technologies that address the needs and challenges of today’s eye care practices.

CIRRUS and FORUM:
Improved workflow and efficiency

Today, the pace of change is breathtaking, placing unprecedented demands on every eye care practice. Clinical data management and integration is crucial. Clarity of information and insight essential. CIRRUS is designed for today’s more efficient, electronic workplace, bringing the results to you - in the exam lane, your office, or laptop. CIRRUS seamlessly integrates with EMRs and also with ZEISS FORUM®, the advanced data management solution for simplifying, centralizing, and viewing vast amounts of clinical data from ophthalmic instruments.

Carl Zeiss Customer Care:
Your partner for success

It takes a special partner to support you and your practice to meet today’s challenges. One that delivers support and services that you can rely upon when you need it most. The ideal partner for an era when just keeping up is not enough. Today is about staying ahead.