Visante omni
Technical Specifications

System Components
- Visante OCT Model 1000
- ATLAS Model 9000
  (also compatible with ATLAS Models 993 and 995)
- Visante-ATLAS Power Table (optional)

DICOM compatibility
With the optional DICOM Gateway module, Visante omni can be linked to compatible patient management systems or electronic medical record systems. Paperless workflow between connected work stations and computers eliminates data entry errors and increases efficiency and safety.

<table>
<thead>
<tr>
<th>Features</th>
<th>VISANTE omni</th>
<th>Visante OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anterior segment OCT scanning</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Pachymetry maps</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Relative pachymetry map</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Automatic eye tracking</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>V-Trac™ Registration</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Anterior and posterior topography maps</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Holladay Report</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>ATLAS Review Software*</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>ATLAS Pathfinder II Corneal Analysis†</td>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VISANTE OCT Anterior Segment Imaging System</th>
<th>(Model 1000) Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illumination laser source</td>
<td>Long wavelength 1.310 nm superluminescent LED</td>
</tr>
<tr>
<td>Range: 16 mm x 6 mm</td>
<td></td>
</tr>
<tr>
<td>Scan types</td>
<td>Anterior segment</td>
</tr>
<tr>
<td>Artifex</td>
<td>Single, dual and quad line scans</td>
</tr>
<tr>
<td>256 A scans per line sampling</td>
<td></td>
</tr>
<tr>
<td>Global Pachymetry</td>
<td>Range: 10 mm x 3 mm</td>
</tr>
<tr>
<td>16-line scan pattern</td>
<td></td>
</tr>
<tr>
<td>2048 measurement points</td>
<td></td>
</tr>
<tr>
<td>Corneal</td>
<td>10 mm x 3 mm (high-resolution)</td>
</tr>
<tr>
<td>512 A scans per line sampling</td>
<td></td>
</tr>
<tr>
<td>Raw Image Mode</td>
<td>Range: 16 mm x 6 mm (standard), 10 mm x 3 mm (high-resolution)</td>
</tr>
<tr>
<td>512 A scans per line sampling</td>
<td></td>
</tr>
<tr>
<td>Optical resolution</td>
<td>Axial: 18 μm</td>
</tr>
<tr>
<td>Tranverse (center): 60 μm</td>
<td></td>
</tr>
<tr>
<td>Software Modules</td>
<td>Refractive Tools</td>
</tr>
<tr>
<td></td>
<td>Iris-Coronal Tools</td>
</tr>
<tr>
<td></td>
<td>Topography Link Software†</td>
</tr>
<tr>
<td></td>
<td>DICOM Gateway</td>
</tr>
<tr>
<td>Computer</td>
<td>Windows® XP Professional / 3.0 GHz Pentium® IV / 1 GB memory</td>
</tr>
<tr>
<td></td>
<td>Integrated 15-inch flat-panel display</td>
</tr>
<tr>
<td>Dimensions/ Weight</td>
<td>48.5 cm H x 43.8 cm W x 63.2 cm D; 34.5 kg</td>
</tr>
<tr>
<td></td>
<td>(19.1 inch H x 17.2 inch W x 24.9 inch D; 76.1 lb)</td>
</tr>
<tr>
<td>Electrical</td>
<td>110/120V, 60Hz, 2.6 A</td>
</tr>
<tr>
<td></td>
<td>220/240V, 50 Hz, 1.3 A</td>
</tr>
</tbody>
</table>

* Available on Visante OCT instrument
† ATLAS Model 8400 exams only
‡ Requires ATLAS Model 835, 836, or 8400 Corneal Topographer

Carl Zeiss Meditec, AG
Goeschwitzer Str. 51-52
07745 Jena
Germany
Phone: +49 3641 22 0333
Fax: +49 3641 22 0112
info@meditec.zeiss.com
www.meditec.zeiss.com

Carl Zeiss Meditec, Inc.
5160 Hacienda Drive
Dublin, CA 94568
USA
Phone: +1 925 557-4100
Toll free: 1 800 342 9821
Fax: +1 925 557 4101
info@meditec.zeiss.com
www.meditec.zeiss.com/us
As individual diagnostic devices, the Visante® OCT and the ATLAS Corneal Topographer are valuable assets to clinical practice. United as Visante® omni, the system offers physicians a precise and unique assessment of the cornea and anterior segment. Visante® omni has the power to enhance diagnosis and improve patient selection to achieve a new level of therapeutic confidence.

**Visante OCT: Precision Anterior Segment Imaging**

The Visante OCT uses a non-contact technique to provide sharp, highly detailed images and precise biometrics of the anterior segment, including corneal shape and angle information — without the need for ocular anesthesia or time-consuming water baths. Visante OCT delivers valuable pre- and post-surgical information for use in excimer laser surgery and corneal transplants as well as pre- and post-glaucoma surgical care and phakic IOL implantations.

**ATLAS: Proven Placido Disk Corneal Topography**

Designed for accuracy and ease of use, ATLAS has been shown to provide accurate and repeatable results through its patented Placido disk technology.1,2 The ATLAS excels in a variety of applications, including assisting with refractive surgery screening, aspheric IOL selection, and contact lens fitting.

**Performance & Precision**

**V-Trac™ Registration System**

Linking ATLAS topography and Visante OCT pachymetry, V-Trac Registration System enables Visante® omni to reliably generate posterior topography through precise corneal vertex alignment, with strict criteria to prevent potential misalignment.

---


---

Visante® omni

The power of two: Anterior Segment Imaging with Corneal Topography

As the first system to combine OCT and Placido disk technologies, Visante® omni creates a new dimension in corneal and anterior segment evaluations. Integrating proven anterior topography from the ATLAS® Corneal Topographer with precision OCT pachymetry, Visante® omni provides comprehensive anterior and posterior topography with pachymetry analysis; for improved patient selection and care. The Holladay Report conveniently summarizes these results on a single page for effective decision-making and practice efficiency.
Visante OCT provides a full-width anterior segment imaging

Visante OCT highlights:
- Advances two powerful and proven technologies: OCT and Placido disk.
- High-resolution image quality.
- Full-width anterior segment imaging.
- Complete anterior chamber angle visualization and measurement.
- The Holladay Report provides an easy to interpret, single-page overview of corneal pachymetry and topography. Enabling efficient patient selection, the Holladay Report includes:
  - Topography maps of the anterior and posterior cornea, including posterior elevation.
  - Pathfinder and retinal pachymetry analyses.
  - Key corneal data, including simulated keratometry (K's), astigmatism (Q), corneal astigmatism, and spherical aberration Z(4,0).

OCT and Placido Disk

The unique visualization and measurement capabilities of Visante OCT make it a versatile and indispensable surgical planning and postoperative system for refractive surgeons.

PathFinder™ II Corneal Analysis Software

The ATLAS incorporates PathFinder II Corneal Analysis Software, a reliable anterior topographic program with an extensive clinical database to assist with refractive surgery patient selection and keratometric measurements. PathFinder II has been independently validated to have 90% sensitivity and 96% specificity in discriminating normal versus abnormal corneas.1

Refractive tools for LASIK and phakic IOL surgery

The Refractive Tools Software Module enables rapid visualization of residual stromal bed structure and depth of corneal opacities or drusen. This feature can be used to determine residual stromal bed thickness, which may be the most sensitive metric to detect early corneal pathology such as keratoconus.5, 6

Refractive Surgery

Enhance patient selection and advance diagnostic confidence

Performance

- Provides a complete anterior segment view of the eye's cornea.
- Provides anterior and posterior corneal thickness measurements.

The Holladay Report: Integrating posterior topography

Developed in collaboration with Jack Holladay, MD, the Visante OCT Holladay Report provides an easy to interpret, single-page overview of corneal pachymetry and topography. Enabling efficient patient selection, the Holladay Report includes:
- Topography maps of the anterior and posterior cornea, including posterior elevation.
- Pathfinder and retinal pachymetry analyses.
- Key corneal data, including simulated keratometry (K's), astigmatism (Q), corneal astigmatism, and spherical aberration Z(4,0).

“Tangential Map: Anterior tangential map of a keratoconus-suspect cornea highlights of the disease. Note the asymmetry and inferior steepening overall corneal power. The Axial Map describes curvatures: Anterior Axial curvature describes keratometry (K's), corneal astigmatism, and spherical aberration Z(4,0), whereas the posterior elevation map may be the most sensitive metric to detect early corneal pathology such as keratoconus.”5, 6

References:
Advanced Diagnostic Utility

Valuable and multi-disciplined applications of both Visante OCT and ATLAS add superior diagnostic care and confidence to your daily practice workflow.

Anterior Segment Care
Visante OCT can significantly improve diagnostic and treatment confidence in cornea and anterior segment care. Surgical planning and guidance can be optimized for anterior and posterior lamellar surgery, or when imaging behind an opaque or scarred cornea. Diagnostic capabilities are further enhanced with accurate visualization and measurement of iris abnormalities.

1) Full-width anterior segment image in rainbow color scheme
2) Flap tool measurement after lamellar keratoplasty
3) High-resolution image of an iris cyst

Glaucoma Care
The infrared light source and non-contact technique of the Visante OCT facilitates a natural view and assessment of the anterior chamber angle, without the influence of corneal indentation or pupil constriction (miosis). Visante OCT allows rapid evaluation of the anterior chamber angle and structures as part of a complete anterior segment examination. Imaging the angle region post Laser Peripheral Iridotomy (LPI) ensures patency of the procedure and removal of the narrow angle condition and associated risks.

1) High-resolution image with objective irido-corneal angle results
2) High-resolution image of a narrow anterior chamber angle

Cataract Care
The ATLAS enhances IOL selection and power calculation, especially for challenging cases such as post kerato-refractive surgery and premium IOL patients.
- Established IOL power formulas for myopic and hyperopic LASIK/PRK and RK
- Optimized aspheric IOL selection with corneal spherical aberration, Z(4,0)
- Patient education with image simulation of higher-order corneal aberrations
- Perioperative astigmatism management

Overview with Numerical Ring values, Corneal Wavefront, Simulated Keratometry, and Image Simulation.

1 1 1 2
1
8
9