Reach New Heights

HRT Retina Premium Edition

Speed. Volume. Precision.

HEIDELBERG ENGINEERING
Retinal Measurements
You Can Trust

As an aid in the diagnosis and management of retinopathies the HRT Retina Module is the True Measure of Confidence.

Reliable Diagnosis and Management of

- Age-Related Macular Degeneration (AMD)
- Diabetic Macular Edema
- Cystoid Macular Edema
- Macular Hole

The HRT Retina Module offers a powerful option for aiding diagnoses and tracking the progression and treatment of retinopathies. The HRT’s unique confocal scanning laser technology combines retinal thickness and index of edema for unparalleled accuracy and reliability.

A Powerful Option for Tracking Retinal Disease

HRT Retina Module now features retinal thickness measurements that enable identification and tracking of structural changes due to retinal pathologies including age-related macular degeneration (AMD), diabetic macular edema (DME), and cystoid macular edema (CME).

Features

- Color-coded 2-D and 3-D thickness map of the retina
- Edema Index can reveal early structural change
- Automatic image alignment for follow-up investigations
- Thickness map overlaid on vessel pattern for comparison with color fundus, FA and ICGA
- Detect structural change from DME, CME, AMD
- Real-time quality checks with instant operator feedback
- Quick patient review, non-invasive, with or without dilation
- Free positioning of ETDRS grid
- No additional hardware required for current HRT owners


2 Computer processors < 2.0 GHz may need to be updated.
Get the True Picture with HRT Retina Module

60 x faster
32 x more images
200 x more data

The HRT Retina Module Advantage

■ Speed
Compared to the OCT Fast Macular Thickness Map, HRT Retinal Images are 60x faster – minimizing eye movement artifact.

■ Volume
Compared to the OCT Fast Macular Thickness Map, the HRT acquires 200x more data and scans 32x more images per exam that help the HRT separate fact from artifact.

■ Precision
The HRT utilizes vessel patterns and other landmarks to properly align scans for composite images and to track changes over time.
The HRT data is built on the strength of a rapid, transverse scan, showing vascular anatomy. The vessel patterns and other landmarks are used for alignment.

1. Base Scan*

Transverse Image

2. Assemble Scans

The HRT Thickness data is built on 3 sets of 64 scans (24 ms per exam). Each scan is checked for alignment and quality. Poor quality images are omitted.

3 Sets of 64 Scans

3. Map Location*

The HRT Thickness Map is derived from 147,000 composite data points. Automatic image alignment enables accurate tracking over time.

No Interpolation

The OCT relies on a cross sectional image and identification of layers to derive its data.

1. Base Scan*

Cross Sectional Image

2. Assemble Scans

The OCT Fast Macular Thickness data is built on 6 single scans. Each scan takes 320 milliseconds.

6 Single Scans

3. Map Location*

The Fast Macular Thickness Map is constructed from 768 data points. The algorithm assumes the 6 single scans are symmetrical and uniform. Over 90% of the image is interpolated.

>90% Interpolation

* same patient, same day, experienced operator