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Microscopy
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Polarization
Sensitive OCT

OCT Microscope

Spectral Domain Optical Coherence Tomography (Page 1 of 6)



Spectral Domain OCT Features

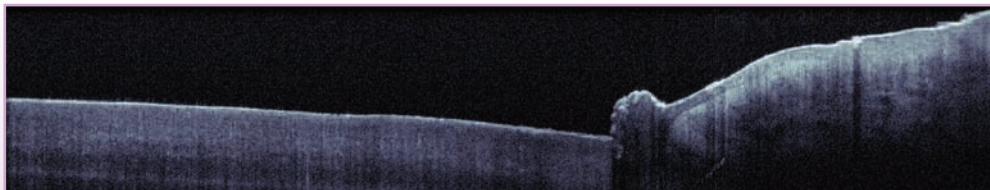
- 930 nm and 1325 nm OCT Systems Available
- Custom and OEM Options
- Fully Operational System Right Out of the Box

TELESTO
OCT Imaging System

Overview

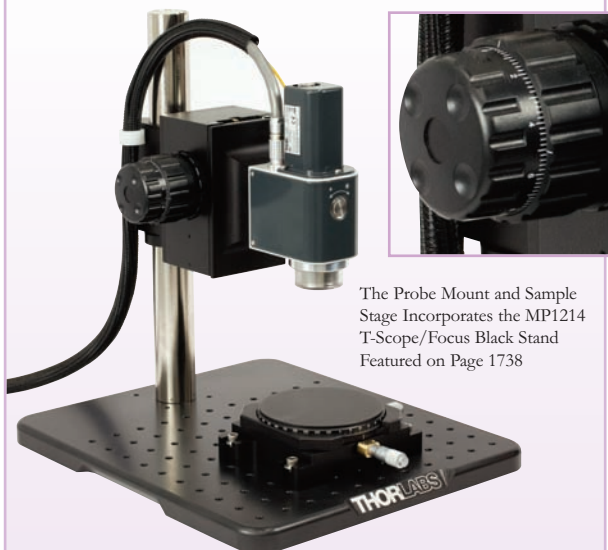
Thorlabs offers several Spectral Domain Optical Coherence Tomography (SD-OCT) Systems to address a wide variety of imaging applications. Each system is designed to provide the best balance between imaging depth and axial resolution. All systems incorporate long-lasting, high-power Superluminescent Diode (SLD) light sources to provide the best in imaging-quality. The spectrometer detection system is expertly built

around high-quality silicon-based (930 nm SD-OCT Systems) or InGaAs-based (1325 nm SD-OCT System) line cameras. All systems include a probe mount, computer that is preinstalled with high-performance user software, and a software development kit (see below).



CALLISTO 930 nm OCT
Image of Human Nailfold.
Image Size: 8.9 mm x 1.7 mm

Probe Stand

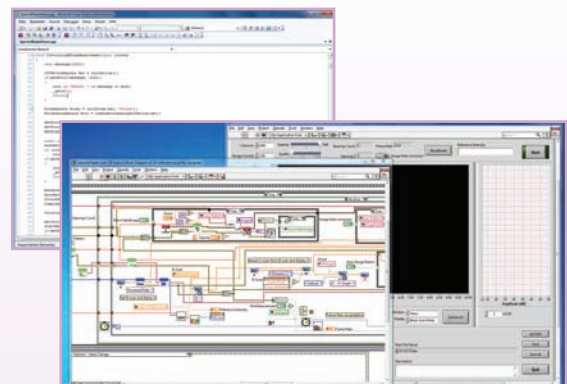


The Probe Mount and Sample Stage Incorporates the MP1214 T-Scope/Focus Black Stand Featured on Page 1738

All OCT Systems Include a Probe Mount with Sample Stage

- Coarse and Fine Z-Travel of Probe
- Sample Stage with XY Translation and Rotation
- Post Mounted Using DP14 Vibration Damping Ø1.5" Post on 12" x 14" Breadboard

Software Development Kit



Along with high-performance user software (see pages 1744 – 1745 for details), all SD-OCT Systems include a software development kit from which the user application is built upon.

- C++ and LabVIEW™-Based Interfaces
- Seamless Integration into User's Own Software
- High-Speed Processing in Both Programming Languages
- Includes Hardware Control, Extensive Processing Routines, Display Options, and Data Import/Export Controls
- Doppler Processing and Display Routines

Spectral Domain Optical Coherence Tomography (Page 4 of 6)

High-Speed HYPERION™ OCT Imaging System

The HYPERION™ OCT Imaging System provides high-speed acquisition up to 110,000 A-Scans per second. At such rates, this system is ideal for fast volume data acquisition or monitoring rapid dynamic processes within a sample.

The HYPERION utilizes a Camera Link® data connection and is controlled via software preinstalled on a high-performance computer that is capable of online rendering and display of all measured 3D datasets. It also includes a 3D scanning probe with integrated video camera for volume imaging and live video display. The included stand and sample stage provides XY translation and rotation of the sample along with axial travel of the probe. The HYPERION is fully functional right out of the box.



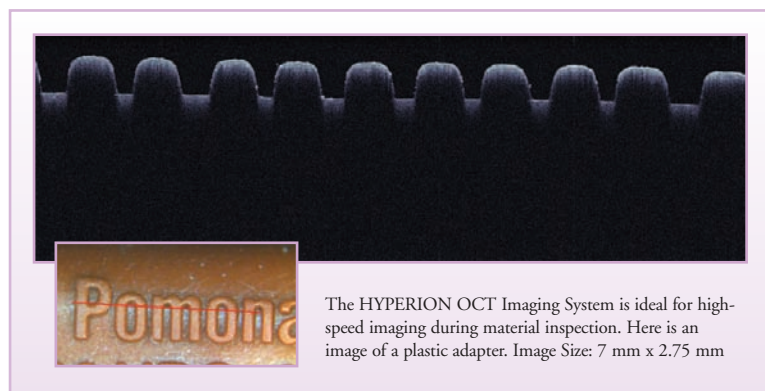
HYPERION OCT Imaging System
(Computer Subject to Change)

HYPERION™ Features

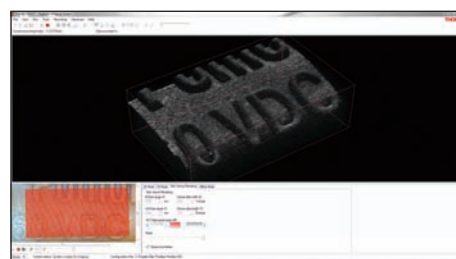
- High-Speed Acquisition Enables Real-Time Streaming of Volume Data Sets
- Online Rendering of 3D Volumes
- Ideal for High-Speed and Volume Imaging Applications
- Large Field of View: 10 mm x 10 mm x 2.7 mm
- Custom Configurations Available (See Page 1753 for Details)

SPECIFICATIONS	
Center Wavelength	930 nm
A-Scan/Line Rate	110 kHz
Axial (Depth) Resolution	5.8 μm (Air)
Lateral Resolution	8 μm
Maximum FOV* (L x W x D)	10 mm x 10 mm x 2.7 mm
Sensitivity	86 dB
Optical Power on Sample (Typical)	1.5 mW
Pixels per A-Scan	1024
Data Interface	Camera Link®
Pixel Depth	12 Bit

*Field of View



The HYPERION OCT Imaging System is ideal for high-speed imaging during material inspection. Here is an image of a plastic adapter. Image Size: 7 mm x 2.75 mm



High-Speed Imaging with the HYPERION enables real-time volume display up to 7 volumes per second

Included with this System

- SD-OCT Engine with 930 nm Superluminescent Diode Light Source and Linear CCD Array-Based Spectrometer
- 2D Scanning Probe for Acquisition of 3D Volume OCT Images
- Video Camera Integrated in the Scanning Probe for Live Video Imaging of the Sample
- Probe Stand with Sample Stage (See Page 1748)
- Computer and 22" Monitor
- High-Performance Software (See Pages 1744 – 1745)



Close Up of
SD-OCT Probe

Custom and OEM configurations of the HYPERION, including 840 nm central wavelength and extended imaging depth designs, are also available. For more details, see page 1753.

ITEM #	\$	£	€	RMB	DESCRIPTION
HYPERION	CALL	CALL	CALL	CALL	930 nm, 110 kHz SD-OCT System