Imaging

CHAPTERS

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Laser Scanning Essentials Kits



Features

- Includes Core Components to Build a Laser Scanning Imaging System
 - Scan Head with Galvo-Resonant Scanner Pair
 - Scan and Tube Lenses
 - Two-Channel Electronics Control and Computer with 24" Monitor
 - ThorImageLSTM Software
- 4-Channel and High-Sensitivity Upgrades Available Upon Request
- Visible (LSKIT-VIS) and IR (LSKIT-IR) Versions

The Laser Scanning Essentials Kit is Thorlabs' solution for researchers who desire to build their own laser scanning microscope. Two versions of kit are available: LSKIT-VIS for the 400-750 nm transmission range and LSKIT-IR for the 650-1050 nm range. This kit contains the components necessary to construct a modular laser scanning imaging system. The design provides the flexibility necessary to integrate a custom system to meet individual imaging needs.

The scan head contains a high-speed resonant scanner galvanometer pair, which uses single point illumination to scan across the sample for fast image acquisition (30 fps at 512 x 512 pixel resolution). The scan head also houses filter and beam steering cubes that have drop-in designs, enabling quick exchange of mirror sets.

Along with the scan head, these kits include scan and tube lenses, an electronic control unit, a computer with 24" monitor, and ThorImageLS software. The electronic control unit for the LSKIT-VIS and LSKIT-IR is designed for two-channel detection with multi-alkaline, standard-sensitivity PMTs (sold separately, see page 1729). The included scan and tube lenses for these systems can also be purchased separately (see pages 1713 – 1716). The LSKIT-VIS utilizes the CLS-SL scan lens and ITL200 tube lens, whereas the LSKIT-IR utilizes the MPM-SL scan/tube lens combo. Upon request, these kits can be upgraded to four channels and for use with high-sensitivity, GaAsP PMTs.

Schematic Diagram and Beam Path of Laser Scanning Essentials Kit Scan Head Resonant Scanner Galvo Scanner Path Intermediate Image Plane Tube Lens



Thorlabs' Laser Scanning Kits inclu-	de ThorImageLSTM user software for
high-speed acquisition and control	(see page 1666 for details).

SPECIFICATIONS						
Excitation						
Transmission Range	LSKIT-VIS: 400 – 750 nm LSKIT-IR: 650 – 1050 nm					
Diffraction- Limited FOV	LSKIT-VIS: FN25 (486 – 750 nm); FN23 (400 – 700 nm) LSKIT-IR: 16 mm Diagonal Square (Max) at the Intermediate Plane					
Imaging Speed	30 fps @ 512 x 512 Pixels 120 fps @ 128 x 128 Pixels 2 fps @ 4000 x 4000 pixels (Bi-Directional Scan)					
Scanner	X: Resonant Scanner Y: Galvanometer Scanner					

ITEM #	\$	£	€	RMB	DESCRIPTION
LSKIT-VIS	\$ 48,500.00	£ 34,920.00	€ 42.195,00	¥ 386,545.00	Visible Laser Scanning Essentials Kit, 400 – 750 nm
LSKIT-IR	CALL	CALL	CALL	CALL	IR Laser Scanning Essentials Kit, 680 – 1400 nm

SPECIFICATIONS