USB2.0 CCD Line Camera with External Trigger

Features

Hardware Features

- 3000 Pixel Silicon Linear CCD Array (7 µm x 200 µm Pixel Size)
- 12-Bit A/D Converter for High Intensity Resolution
- High Scan Rate (up to 190 scans/second)
- Optical Integration Time Adjustable from 1 µs to 200 ms
- Ext. Trigger Capability via BNC Input
- USB2.0 (480 Mb/s) and USB1.1 (12 Mb/s) Compatible
- No External Power Requirements

Software Features

- Real-Time Spectrum Measurement
- Zooming, Absorbance, Transmittance, and Relative Difference Measurements
- Gaussian Fitting Routines
- User-Defined, Real-Time Routines
- Compatible with Windows 2000/XP/Vista
- NI LabWindows/CVI™, NI LabVIEW™, MS Visual C++™, and Borland C++™

LC1-USB

Thorlabs' CCD Line Cameras have several advantages over their area-array counterparts, including high optical linear resolution. This allows system developers to use the cameras to capture two-dimensional (2D) images by moving the object or the CCD perpendicularly to the scan line. In the past, the lack of high-speed camera interfaces limited the choice to black and white camera arrays. To overcome this obstacle, Thorlabs introduced its LC1-USB Line Camera, a black and white line camera based on a single-line, 3000 pixel CCD chip with a USB2.0 (480 Mb/s) and USB1.1 (12 Mb/s) interface. The LC1-USB is a compact, plug-and-play, linear camera that is ideal for a variety of applications in industry process control, optics, biology, spectroscopy, and reflection imaging. The camera is based on a linear CCD array housed in a 3.60" x 2.60" x 1.00" (91.4 mm x 66.0 mm x 25.4 mm) enclosure. Setting up the LC1-USB Line Camera is very easy; the user simply installs the latest version of the operating software onto any desktop or notebook PC and then connects the USB cable from the line camera to the PC, eliminating the need for installing a DAQ card.

The LC1-USB accepts the NFM1LC1 F-Mount Adapters for interfacing to standard camera lenses. It has tapped holes (#4-40) at the front plate for easy connection to Thorlabs' 30 mm Cage Assemblies, allowing the user to integrate optical components in front of the camera. The LC1-USB also has five #8-32 and four M4-0.7 threaded mounting holes.

NFM1LC1

The NFM1LC1 is designed to adapt F-Mount based lens systems easily to our popular LC1-USB CCD Line Camera. It is ideal for applications requiring an adjustable zoom and focal length for imaging on the line camera.

For other F-Mount Adapters
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ITEM#	$	£	€	RMB	DESCRIPTION
LC1-USB	$ 879.00	£ 609.40	€ 780,40	¥ 7,422.30	USB2.0 Line Camera
NFM1LC1	$ 125.50	£ 87.00	€ 111,50	¥ 1,059.80	Nikon F-Mount Adapter

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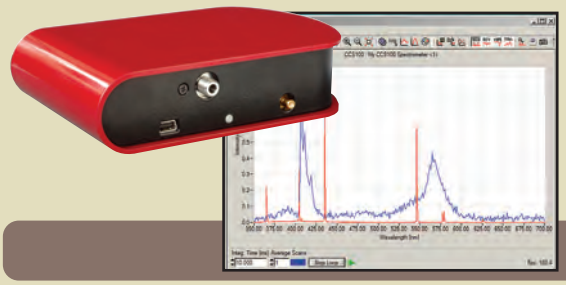

Features

- 3 Models for the 200-1000 nm Range
- Resolution <0.5 nm FWHM
- Sensitivity of 160 V/lux·s
- Integration Time of 10 µs to 60 s
- Czerny-Turner Spectrometer
- 30 mm x 120 mm x 80 mm Footprint
- High-Speed USB Connection
- External Trigger Synchronization
- 16-Bit A/D Converter
- 3,648 Pixel CCD Line Array

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