

## ISG LightWise FireWire™ Line Scan Cameras

- 1024 and 2048 Pixel Linear arrays
- Up to 27,500 lines per second
- Compact Size



The LightWise line scan cameras are excellent solutions to low-cost, high-speed applications. These cameras are designed for the OEM in mind and are provided in a small footprint for requirements with tight space constraints. The FireWire™ standard is compliant with the IEEE-1394 IIDC DCAM Specification Version 1.3, and each unit has external opto-isolated programmable I/O for trigger/strobe functions. The 1024 pixel version offers rates up to 10K lines per second at 14-bit resolution and is ideal for not only machine vision but also spectroscopy and bar code reading requirements. The 2048 pixel unit can perform at a rate up to 60 MHz at 12-bit resolution strongly suited for machine vision and edge detection. User-programmable controls include integration time, gain adjustments, offset, bit depth and data rate. Typical applications include bar code reading, encoding and positioning, metrology, and high-speed scanning. *Each camera is packaged with driver software and a user's manual.*



**All cameras are compatible with National Instruments IMAQ IEEE-1394 driver, Vision Assistant, Vision Builder for Automated Inspection, and the Compact Vision System (CVS).**

Line Scan Camera	Specifications	
	<b>LW-ELIS-1024a-1394</b>	<b>LW-SLIS-2048a-1394</b>
<b>Imaging Device:</b>	Linear CMOS	Linear CMOS
<b>Sensing Area:</b>	8.0 mm x 125 microns	14.3 mm x 7.0 microns
<b>Pixel Size:</b>	7.8 micron x 125 micron Rectangular	7.0 micron x 7.0 micron square
<b>Pixels (H x V):</b>	1024 x 1	2048 x 1
<b>Pixel Depth:</b>	14-bit	12-bit
<b>On-Board Image Buffer</b>	16 Megabytes	16 Megabytes
<b>Camera Control:</b>	Via Software	Via Software
<b>Line Scan Rate:</b>	10K lines per second	27K lines per second
<b>Pixel clock:</b>	10 MHz	60 MHz
<b>Synchronization:</b>	External or via software	External or via software
<b>S/N Ratio:</b>	> 80 db	> 63 db
<b>Video Output:</b>	FireWire™ IEEE-1394	FireWire™ IEEE-1394
<b>Lens Mount:</b>	C or CS-Mount	C or CS-Mount
<b>Mounting:</b>	Via ¼-20 mounting adapter	Via ¼-20 mounting adapter
<b>Power Requirement:</b>	Via FireWire™ 1394 Cable	Via FireWire™ 1394 Cable
<b>Vibration (10-2K Hz):</b>	7G	7G
<b>Shock:</b>	70G	70G
<b>Dimensions (HxWxL):</b>	38mm x 51mm x 72mm	38mm x 51mm x 72mm
<b>Weight:</b>	176g	176g
<b>Operating Temp.:</b>	-10 <sup>0</sup> C to 45 <sup>0</sup> C	-10 <sup>0</sup> C to 45 <sup>0</sup> C
<b>Pricing:</b>	Call Graftek Imaging, Inc.	Call Graftek Imaging, Inc.