

## ISG LW-WVGA-G-1394 Intelligent Camera

- Wide-VGA array (752 x 480)
- Full Electronic Global Shutter with 72 fps performance
- Extended Dynamic Range to 110db for low light performance
- On-Board FPGA & Processor for Easy Customization
- Compact Size & Low Cost. Designed for OEM Applications
- Field Upgradeable

*Imaging  
Solutions  
Group*

The new LightWise smart cameras combine CMOS technology and the FireWire™ standard to give a low-cost, high performance solution to machine vision applications. These compact cameras shorten the typical integration time associated with vision systems and offer flexibility for OEM solutions. Fully compliant with the IEEE-1394 IIDC DCAM Specification Version 1.3, these cameras can be used with compatible programs such as NI LabVIEW™, Norpix StreamPix™, Matrox Mil™, MVTec, and other 3<sup>rd</sup> Party Software packages. **All cameras are compatible with National Instruments IMAQ IEEE-1394 driver, Vision Assistant, Vision Builder for Automated Inspection, and the Compact Vision System (CVS).**

All camera controls are done through software, which includes a fully programmable dynamic range/gamma control LUT for any desired response curve. An on-board image buffer is also featured in these cameras. All cameras offer opto-isolated programmable I/O for triggering and strobe control capabilities. User-programmable controls include integration time, gain adjustments, offset, bit depth and data rate. These cameras come packaged with 1394 drivers, GUI Control software and a user's manual. Support for Windows 2000 & XP & LINUX. **These area cameras feature Digital Pan & Zoom hardware or Motion-JPEG as an option.**

	<b>LW-WVGA-G-1394</b>
<b>Imaging Device:</b>	Wide-VGA 752 x 480 CMOS
<b>Sensor Used:</b>	Micron MT9V022
<b>Sensing Area:</b>	4.55mm x 2.97mm (1/3" format)
<b>Pixel Size:</b>	6.0 micron square
<b>Pixels (H x V):</b>	752 x 480
<b>Pixel Depth:</b>	10 / 30 bit (mono / color)
<b>On-Board Image Buffer</b>	16MB for mono & 32MB for color
<b>Camera Control:</b>	Via Software
<b>Frame Rate:</b>	60 fps (752 x 480) & 72 fps (640x 480)
<b>Exposure Control:</b>	Fully programmable
<b>Shutter:</b>	Global TrueSnap™ Shutter
<b>Synchronization:</b>	External or via software
<b>Dynamic Range:</b>	75 db to 110 db
<b>Video Output:</b>	IEEE-1394a
<b>Lens Mount:</b>	C or CS-Mount
<b>Mounting:</b>	Via ¼-20 mounting adapter
<b>Power Requirement:</b>	Via FireWire™ 1394 Cable
<b>Vibration (10-2K Hz):</b>	7G
<b>Shock:</b>	70G
<b>Dimensions (HxWxL):</b>	38mm x 51mm x 72mm
<b>Weight:</b>	176g
<b>Operating Temp.:</b>	-10 <sup>0</sup> C to 65 <sup>0</sup> C
<b>Monochrome:</b>	Yes
<b>Color:</b>	Yes
<b>Pricing:</b>	Call ISG

### Applications include:

**High Speed High Resolution Scanning**  
**Automated Inspection Systems**  
**Machine Vision Systems**  
**Sorting**  
**Bar Code Reading**  
**Web Inspection**  
**Edge Detection**  
**Encoding & Positioning**  
**Metrology**  
**Spectroscopy**  
**Internet Monitoring**  
**Security & Surveillance**

