

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

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 3rd 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.**

| | LW-WVGA-G-1394 |
|------------------------------|---|
| Imaging Device: | Wide-VGA 752 x 480 CMOS |
| Sensor Used: | Micron MT9V022 |
| Sensing Area: | 4.55mm x 2.97mm (1/3" format) |
| Pixel Size: | 6.0 micron square |
| Pixels (H x V): | 752 x 480 |
| Pixel Depth: | 10 / 30 bit (mono / color) |
| On-Board Image Buffer | 16MB for mono & 32MB for color |
| Camera Control: | Via Software |
| Frame Rate: | 72 fps (752 x 480) |
| Exposure Control: | Fully programmable |
| Shutter: | Global TrueSnap™ Shutter |
| Synchronization: | External or via software |
| Dynamic Range: | 75 db to 110 db |
| Video Output: | IEEE-1394a |
| Lens Mount: | C or CS-Mount |
| Mounting: | Via ¼-20 mounting adapter |
| Power Requirement: | Via FireWire™ 1394 Cable |
| Vibration (10-2K Hz): | 7G |
| Shock: | 70G |
| Dimensions (HxWxL): | 38mm x 51mm x 72mm |
| Weight: | 176g |
| Operating Temp.: | -10 ⁰ C to 85 ⁰ C |
| Monochrome: | Yes |
| Color: | Yes |
| Pricing: | 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

