

MS3100

High Resolution 3-Chip Digital Smart Camera in Multiple Spectral Configurations

The MS3100 acquires three channels of crisp 1392 x 1040 images for demanding applications.

A common aperture and accurate alignment provide true color fidelity and optimum image quality.

Multispectral configuration options, smart camera features, and DirectView preview are available.

APPLICATIONS

- Machine Vision
Food Processing, Textiles, Plastics, Lumber, Pharmaceuticals
- Remote Sensing
Precision Agriculture, Environmental Assessment, Archaeology, Geology, Oceanography
- Reconnaissance
- Advanced Surveillance
- Medical/Scientific Imaging
- Robotics



SNAPSHOT

- Color separating prism with three CCD imaging sensors
- 1392(H) x 1040(V) resolution (x3) for 4.3 Million pixels of data
- Image 3-5 spectral bands from 400-1100 nm
- Standard models for RGB, CIR, and RGB/CIR
- Custom multispectral configurations to meet your needs
- Frame rates up to 7.5 fps
- "Smart Camera" features for advanced control and processing
- Display composite, false color, or individual color plane images
- Digital Image Output - EIA-644, RS-422, or Cameralink
- Compact, rugged package
- Independent gain, offset, and exposure control for each channel
- External trigger input with three operating modes
- RS-232 input for configuration and control
- Optional DirectView preview via Progressive Scan RGB
- Optional on-board image processing
- OEM Customization Available

MegaPlus™ MS3100

PERFORMANCE SPECIFICATIONS

Image Device:	(3-ea)1/2 inch Interline Transfer CCD
Picture Elements:	1392(H) x 1040(V)
Pixel Size:	4.65 x 4.65 micron
Pixel clock rate:	14.318 MHz
Sensing Area:	7.6 x 6.2 mm (1/2 inch format)
Frame Rate:	7.5 frames per second
Digital Image Output:	8 bits x 4 taps or 10 bits x 3 taps (32 bits max). EIA-644, RS-422, or CameraLink
Signal/Noise:	60 dB
Lens Mount:	F - Mount or Canon ENG
Electronic Shutter:	Independent shutter time per channel Range: 1/8000 - 1/7.5 sec
Gain Selection:	Independent gain per channel. 0-36 dB
Offset Selection:	Independent offset per channel. 0-127 counts
External Trigger Input	Edge or level, Three modes
External Trigger Source:	Optically isolated BNC or Frame Grabber
Command/ Control Input:	RS-232 port
Operating Temperature:	0-50 C
Operating Voltage:	12 VDC
Power Consumption:	10 Watts
Weight:	1.62 kg
Programmable Functions:	Offset, gain, exposure time, multiplexing, trigger modes, custom processing

Options:

Output:	Progressive Scan RGB (1280x1024 max display resolution).
Signal Processing:	Thresholding, Ratios, Multipliers, Look up Tables, False Color Mapping, Custom Firmware Available

CONFIGURATIONS

RGB CONFIGURATIONS

Acquires separate Red, Green, and Blue image planes for outstanding color fidelity.

CIR CONFIGURATIONS

Color Infrared imaging acquires Red, Green and Near infrared bands approximating Landsat satellite bands. These images are mapped to the Blue, Green, and Red color planes to create false color images similar to color-infrared film for remote sensing applications.

RGB/CIR CONFIGURATIONS

Acquires Red, Green, Blue, and Near infrared bands which can be displayed as standard color, color infrared, or single color images.

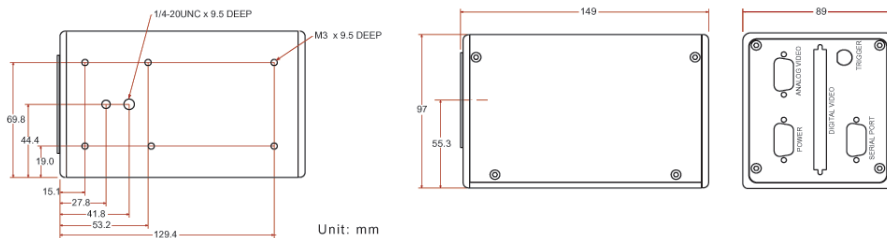
CUSTOM MULTISPECTRAL

Specify the wavelengths and bandwidths required for your application. This configuration is tailored to meet your needs.

SPECTRAL CONFIGURATIONS

Multispectral cameras use a beam splitting prism and three CCD sensors to acquire images in 3-5 spectral bands within the 400-1100 nm sensitivity of the sensors. Standard configurations are available for RGB, CIR, and RGB/CIR. Custom spectral configurations are available to meet customer requirements.

DIMENSIONS



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Note: Specifications are typical and subject to change. 1112-02