

## Advanced Scientific Grade CCD Imaging for Microscopy

powerful software - simple interface - superior images

### ***Full 22mm Field-of-View Imaging***

- **21.4mm Progressive Scan CCD with an Active Area of 15.2mm x 15.2mm**  
Provides the microscopist with the largest field-of-view digitally as seen through the microscope oculars.
- **4-Megapixel Imaging with 7.4 x 7.4 micron pixels**  
Delivers exceptional image detail and dynamic range in both brightfield and low-light fluorescence images.
- **Point and Shoot Simplicity**  
Fluorescent and brightfield images captured effortlessly in RGB color or monochrome.
- **Optronics Exclusive Monochrome Decoding Algorithm**  
Provides 12-bit high-resolution monochrome images with 4X increased sensitivity - crucial for a wide range of fluorescent imaging techniques.
- **Optronics Exclusive PictureFrame™ 2.0 Imaging Application**  
Comprehensive image processing suite with measurement and annotation, scale bar, AVI file-compliant time lapse imaging, automated image archiving and real-time pseudo coloring with six position image mixing functionality.
- **Optronics Exclusive Flicker-Reduction Technology**  
Provides accurate brightness and color balance readings during short exposure times when imaging with light sources of varying intensities.

# Technical Specifications

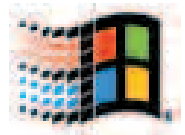
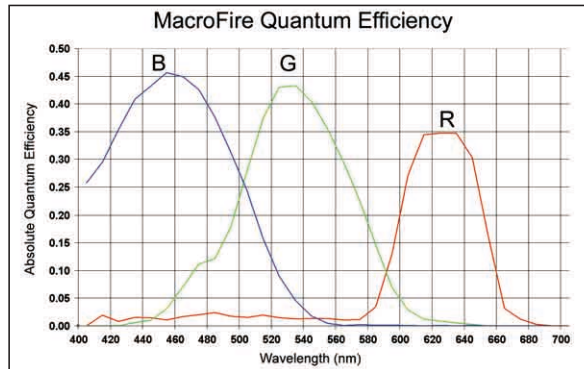
## MACROFIRE®

**CCD Array:** 2048 x 2048 pixels  
**Pixel Size:** 7.4 x 7.4 micron pixels  
**Well Depth:** 40,000 electrons  
**Active Area:** 15.2mm x 15.2mm, 21.4mm diagonal  
**Computer Interface:** IEEE 1394 (FireWire®), 6 pin  
**Software:** Optronics native application, SDK available, Twain, Image-Pro®  
**Optical Interface:** F-mount  
**Electronic Shutter:** To 60 seconds  
**Frame Rates:** 5 FPS @ 2048 x 2048

9 FPS @ 1024 x 1024 (2x2 binning)  
12 FPS @ 680 x 680 (3x3 binning)  
15 FPS @ 512 x 512 (4x4 binning)  
18 FPS @ 408 x 408 (5x5 binning)  
38 FPS @ 64 x 64 (subframed mode)

<b>Binning Modes:</b> (User Defined)	<u>Color</u>	<u>Monochrome</u>
	1 x 1	1 x 1
	3 x 3	2 x 2
	5 x 5	4 x 4

**Subframes Modes:** 64 - 2048 lines x 64 - 2048 columns  
**Bit Depth:** 36-bit color  
**Physical Dimensions:** 5.2 in (W) x 5.2 in (W) x 3.7 in (H)  
**Spectral Response Curve:**



**System Recommendations:** PC - 1 GHZ or better PC Running Windows® 98 SE/2000/XP/Me  
1600 x 1200 32-bit color 512 MB Ram  
**MACINTOSH** - G4 OS X Version 10.2 or better 512 MB Ram

Available with Copy Stand Mount

***optronics.com/cameras (800) 796-8909***

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