

# ///MegaPlus II ES 1602 / ES 1603

## MegaPlus II Family

The *MegaPlus II* family of cameras features a unique design consisting of our *MegaPlus II* controller and up to four camera heads. The camera controller allows for easy camera configuration, and provides the intelligence for each camera head such as color space conversion, gamma control, and flat field correction. This family of digital CCD cameras includes both color and monochrome cameras with resolutions up to 11 megapixels.

By making it possible to use multiple camera heads on a single controller, the *MegaPlus II* system easily supports applications requiring large horizontal resolution or acquiring images from multiple angles. The *MegaPlus II* system also lets you mix and match camera heads on a single controller.

## MegaPlus II ES 1602 / ES 1603

The ES 1602/1603 consists of a 1.6-megapixel full-frame camera head and controller, offering both CameraLink and Firewire interfaces selectable via our control software - *MegaPlus Central*. The camera supports up to 12-bit monochrome images at 6.2 fps for full resolution.

With outstanding image quality and flexibility, the ES 1602/1603 and controller are ideal for most ophthalmology, semiconductor, and scientific imaging applications.



**MegaPlus II ES 1602 with controller**



**MegaPlus II controller (back)**

## APPLICATIONS

- Medical Imaging
- Ophthalmology
- Metrology
- Inspection
- Scientific Imaging



# MegaPlus® II ES 1602 / ES 1603

## PERFORMANCE SPECIFICATIONS

### CCD Imager

Imaging Device	Kodak KAF-1602/KAF-1603, solid-state, full-frame CCD
Sensor Readout	Full-frame, progressive scan
Pixel Size	9.0 $\mu\text{m}^2$
Resolution	1536 x 1024 pixels (1.57 Mpixel)
Imager Size (diagonal)	16.6 mm
Active Area	13.8 mm horizontal x 9.2 mm vertical
Spectral	Monochrome
Bit Depth	8, 10 or 12 bits
Dynamic Range	74 dB
Frame Rate	CameraLink: 6.42 fps Firewire: 6.2 fps

### Camera Control and Features

Gain Control	0-36 dB
Binning Frame Rates	TBD
Pixel Clock Rate	12 MHz
Minimum Shutter Speed	2 ms
Sensitivity	10 $\mu\text{V}$ /electron

### Controller Features

Input Voltage	12VDC
Power Consumption	14W (DVI off)

### Mechanical Description

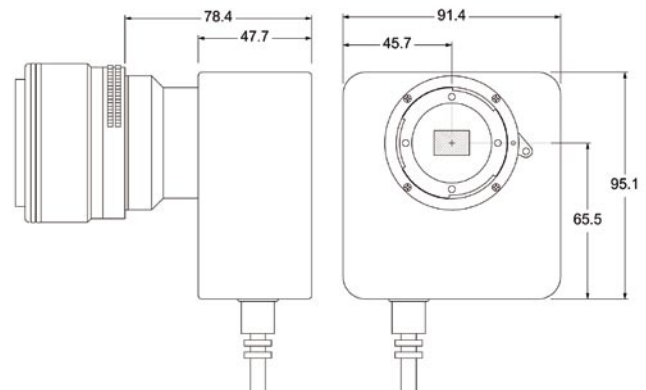
Lens Mount	F mount, C-mount
Camera Head Dimensions	F-mount: 91.4 x 74.2 x 95.1 mm (L x D x H) C-mount: 91.4 x 46 x 95.1 mm (L x D x H)
Controller Dimensions	157 x 157 x 50.8 mm (L x D x H)
Camera Head Weight	625g
Controller Weight	1140g
Tether Cable Length	2m, 5m

### Environmental Requirements

Operating Temperature	0 - 40° C, non-condensing
Vibration	10-500 Hz, 3G, sinusoidal
Shock	5G

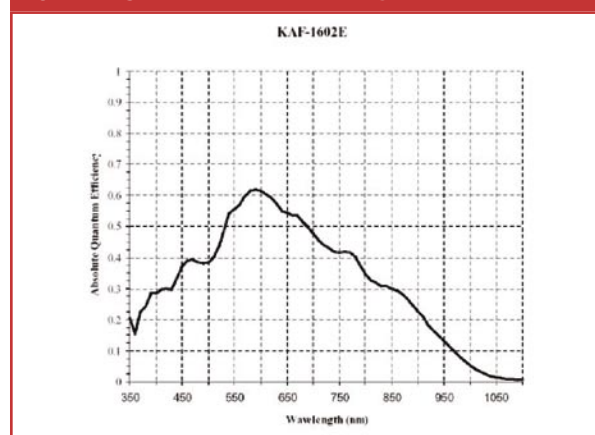
### Safety

Certifications	CE
----------------	----



Note: Specifications are subject to change

## SPECTRAL RANGE



### Worldwide Sales and Support

Americas  
tel: +1-800-462-4307  
tel: +1-858-481-8182  
sales@redlake.com

Asia Pacific  
tel: +65-6293-4758  
salesASPAC@redlake.com

Japan  
tel: +81-3-5639-2770  
salesJapan@redlake.com

Europe, Africa and Middle East  
tel: +31-347-324989  
salesEurope@redlake.com

Copyright © 2004 Redlake, MASD, LLC  
All Rights Reserved

ES 1602/1603 05/05