

# ///MegaPlus™ 1.6i

The MegaPlus1.6i is a high-performance digital camera that combines a spatial resolution of 1.6 million pixels, with 1024 gray levels for each pixel, to deliver superior quality images.

The CCD sensor provides a 1534 x 1024-pixel array with 9 µm square pixels for sensitive and accurate dimensional measurements.

With frame rates of up to 5.5 frames per second and a rugged, compact design, the MegaPlus1.6i is ideal for a wide range of demanding industrial applications.



## S N A P S H O T

### **Sensitivity**

1024 gray levels and minimal dark current provide the dynamic range and sensitivity required for demanding industrial applications.

### **Accuracy**

The MegaPlus 1.6i's square pixels provide the accuracy required by metrology applications.

### **Ease of Use**

With a comprehensive command set and bundled control software, the MegaPlus 1.6i provides the ease of use you expect from Redlake's MegaPlus cameras.

///MegaPlus™ ...  
for imaging excellence  
when quality counts



## MegaPlus™ 1.6i

### PERFORMANCE SPECIFICATIONS

#### CCD Imager

Imaging Device	Kodak KAF-1602, solid-state CCD, full-frame imager
Sensor Readout	Progressive scan
Pixel Size	9 µm (square format)
Resolution	1534 x 1024 pixels (1,570,816)
Pixel Spacing	9 µm, vertical and horizontal
Active Area	13.8mm horizontal x 9.2mm vertical
Fill Factor	100%

#### Image Quality

Image Uniformity	<2% non uniformity
Responsivity	9620 to 152770 8-bit counts/µW/cm <sup>2</sup> – second @ 550 nm (depending on gain)
Bit Depth	10 bits
Dynamic Range	>65dB
Dark Current	<10pA/cm <sup>2</sup> @ 25°C

#### Camera Exposure and Control

Camera Output	Digital Video
Pixel Clock Rate	10 MHz
Frame Rate	Up to 5.5 fps
Exposure Settings	Mechanical shutter: 20 to 100,000 ms
Operation Modes	Trigger, Continuous, Control
Gain Settings	0 to 24dB in 2dB increments

#### Mechanical Description

Lens Mount	C or F mount
Dimensions	F Mount: 4.45"H x 3.9"W x 5.84"L (113.0 x 99.1 x 148.3mm) C Mount: 4.45"H x 3.9"W x 4.68"L (113.0 x 99.1 x 118.8mm)
Weight	3 lbs (1.26kg)

#### Environmental Requirements

Operating Temp	0° to 35°C (32° to 95°F), non-condensing
Vibration	3G, sinusoidal from 5 to 150 Hz
Shock	20G, non-operating

#### Power Requirements

Input Voltage	12 to 28 VDC
Power Consumption	16 watts, typical

