

///MegaPlus™ 1.4i

The MegaPlus 1.4i is a high-performance digital camera that combines a spatial resolution of 1.4 million pixels, with 256 gray levels for each pixel, to deliver superior quality digital images.

The CCD sensor provides a 1317 x 1035-pixel array with 6.8 µm square pixels for accurate dimensional measurements. The camera also features Accumulation Mode, which significantly reduces dark current and enhances light sensitivity.

With frame rates of up to 6.9 frames per second and a rugged integrated design, the MegaPlus 1.4i is ideal for a wide range of demanding industrial applications.



S N A P S H O T

Sensitivity

Minimal dark current and high dynamic range provide the sensitivity required for demanding industrial applications.

Accuracy

The MegaPlus 1.4i's square pixels provide the accuracy required by metrology applications.

Ease of Use

With a comprehensive command set and bundled control software, the MegaPlus 1.4i provides the ease of use you expect from Redlake's MegaPlus cameras.

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


REDLAKE
1.800.462.4307



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PERFORMANCE SPECIFICATIONS

CCD Imager

Imaging Device	Kodak KAF1401, solid-state CCD, full-frame imager
Sensor Readout	Progressive scan
Pixel Size	6.8 μm (square format)
Resolution	1317 x 1035 pixels (1,363, 095)
Pixel Spacing	6.8 μm , vertical and horizontal
Active Area	8.98mm horizontal x 7.04mm vertical; 4:3 aspect ratio; 2/3-inch-format compatible
Fill Factor	100%

Image Quality

Responsivity	5020 8-bit counts/ $\mu\text{W}/\text{cm}^2$ -second @ 550 nm
Bit Depth	8 bits
Dynamic Range	72dB
Temporal Noise	<4% rms
Linearity	<4 to 1.2% rms non linearity depending on gain
Dark Current	<10pA/cm ² @ 25°C

Camera Exposure and Control

Camera Output	Digital Video
Pixel Clock Rate	10 MHz
Frame Rate	up to 6.9 fps
Exposure Settings	Mechanical shutter: 10 to 100,000 ms
Operation Modes	Continuous, Control, Trigger
Gain Settings	2 to 24dB in steps of 2dB

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

Power Consumption	8 watts, typical
Input Voltage	12 to 28 VDC



REDLAKE

Redlake MASD, Inc.

tel: 800.462.4307

tel: 858.481.8182

fax: 858.792.3179

email: sales@redlake.com

www.redlake.com



Note: Specifications are typical and subject to change. 1103-02