



vieworks

VA-1MC / VA-2MC VA-4MC / VA-8MC VA-29MC

1M/ 2M/ 4M/ 8M/ 29M MEGA PIXEL RESOLUTION,
HIGH SPEED PROGRAMMABLE DIGITAL CAMERA



The VA camera series incorporates the latest Interline Transfer - Progressive Scan - High Speed CCD technology available from Eastman Kodak Company. The $5.5\mu\text{m}$ square pixel -quad output - family of CCDs provide a wide range of camera resolutions to choose from which have excellent image quality, in terms of low noise and high dynamic range, and high frame rates. Resolutions from 1 to 29 million pixels are available with frame rates up to 125Hz. The VA camera series is the perfect choice for Industrial, Scientific, Military, and Commercial market imaging applications.

Main Features

- *Camera Link Interface
- *Kodak Progressive Scan IT CCD Imager
- *Electronic Shutter
- *8/10/12 bit Data Output
- *up to 125 fps
- *Field Upgradable Firmware
- *Flat Field Correction
- *Defective Pixel Compensation
- *Excellent anti-blooming and anti-smear

Applications

- *Machine Vision Inspections
- *Persistent Surveillance
- *Intelligence, Surveillance, & Reconnaissance
- *Research and Scientific Imaging
- *Microscopy and Metrology
- *Remote Sensing and Scanning
- *ITS (Intelligent Transport System)

www.vieworks.com



VA-1MC / VA-2MC VA-4MC / VA-8MC VA-29MC

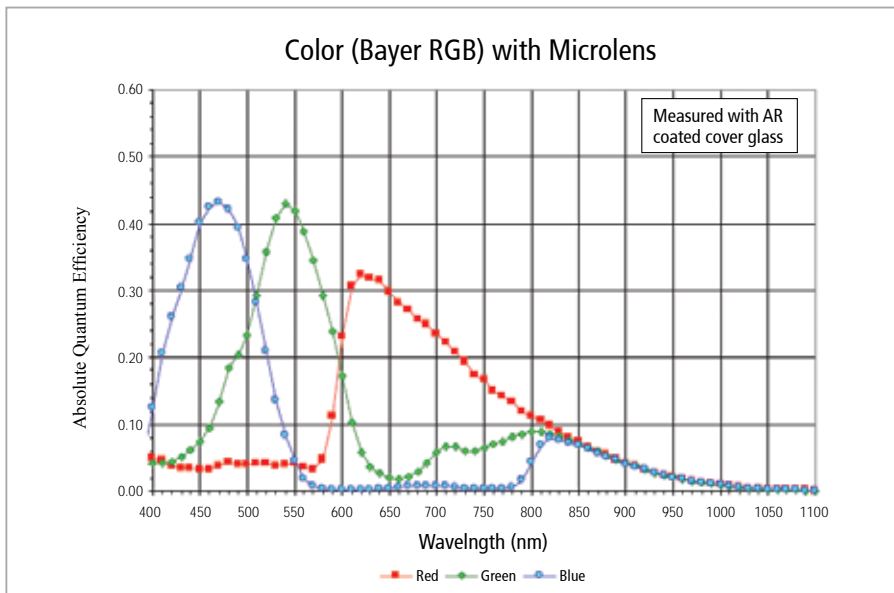
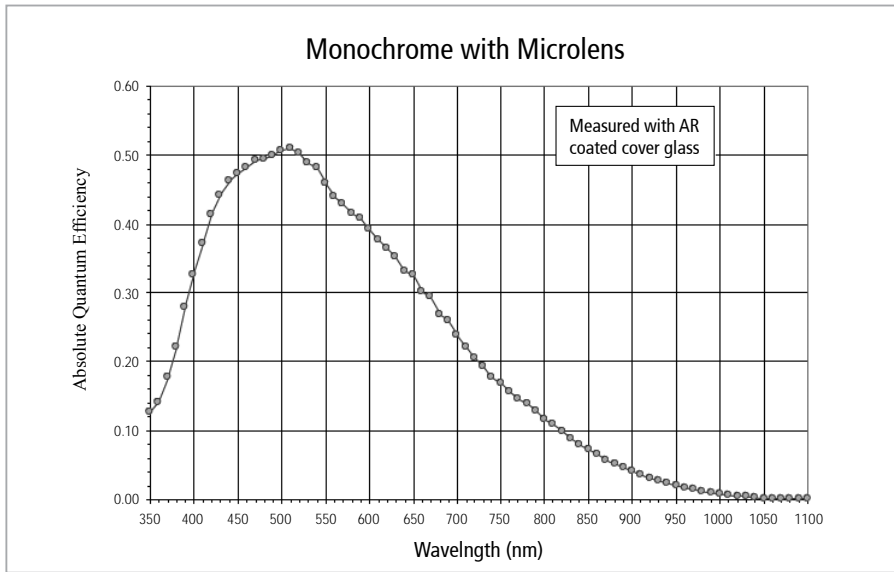
1M/ 2M/ 4M/ 8M/ 29M MEGA PIXEL RESOLUTION,
HIGH SPEED PROGRAMMABLE DIGITAL CAMERA



Specifications

Model	VA-1MC	VA-2MC	VA-2MWC (HD)	VA-4MC	VA-8MC	VA-29MC
Active Image (HxV)	1024 x 1024	1600 x 1200	1920 x 1080	2336 x 1752	2396 x 2472	6576 x 4384
Pixel Clock	40/80 Mhz					
Pixel Size	5.5 x 5.5 microns					
Video output	8/10/12 Bits - 1, 2, 4 Channel Readout					
Smear	-100 dB					
Dynamic Range	64 dB					
Shutter	Global Electronic Shutter					
Max Frame Rate	125 FPS	68 FPS	64 FPS	32 FPS	16 FPS	5 FPS
Exposure Time	1/100000 sec to ~7 sec (10us steps)					
Partial Scan	345 FPS at 100 Lines	200 FPS at 100 Lines	175 FPS at 100 Lines	120 FPS at 100 Lines	60 FPS at 60 Lines	TBD
Gamma Correction	User Defined LUT					
Black Offset	Adjustable 0-127 LSB at 12 bit, 256 Steps					
Video Gain	Analog 0-32 dB, 900 Steps					
Trigger Mode	Free Run, Overlap, Fast, PIV (Double Trigger) Programmable Exposure time and Trigger polarity					
External Trigger	External, 3.3-5.0V 10mA optically isolated					
Software Trigger	CC1 (Camera Link), programmable					
Camera Interface	Camera Link™					
Lens Mount	C mount	C or F mount		F mount		F mount
Power	10 - 14VDC 6W max					
Environmental	-5 to +40 degrees Celsius Storage -30 to +65 degrees Celsius					
Mechanical	68 x 68 x 54mm 420g (C mount) 68 x 68 x 83mm 460g (F mount)					

Quantum Efficiency Curves




Ordering Scheme

VA - 8MC - M16AO	
Series	Sensor Option
VA series	A0 - Kodak
Sensor Resolution	Frame Rate
1M - 1 megapixel	5 - 5 fps
2M - 2 megapixels	16 - 16 fps
4M - 4 megapixels	32 - 32 fps
8M - 8 megapixels	64 - 64 fps
29M - 29 megapixels	68 - 68 fps
	125 - 120 fps
Interface	Mono / Color
C - Camera Link	M - Monochrome
	C - Color


Connector Specifications

Power



1 2 3 : +12V DC, 4 5 6 : GND (HR10A-7R-6PB)

Control



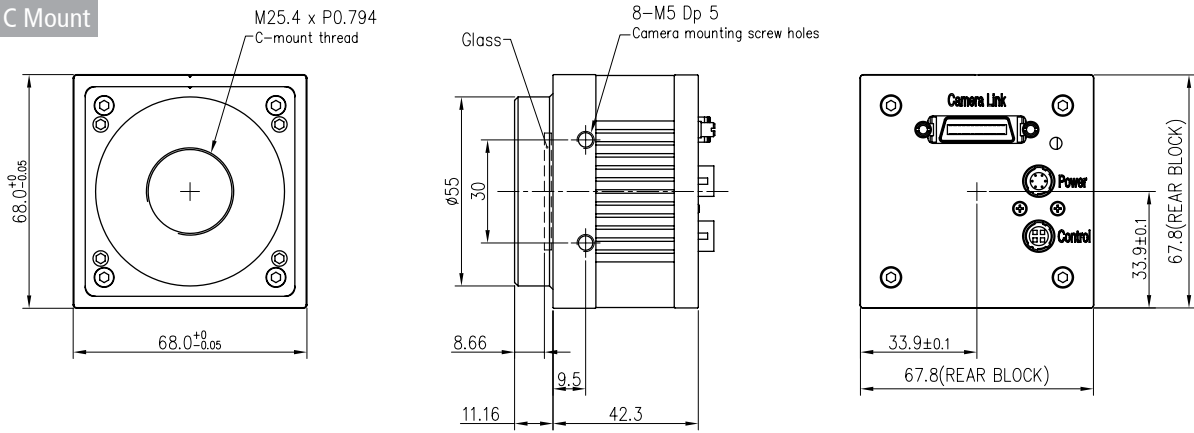
1 : Trigger IN+, 2 : Trigger IN-
3 : Strobe OUT- (GND), 4 : Strobe OUT+ (HR10A-7R-4SB)

Connectors on camera body

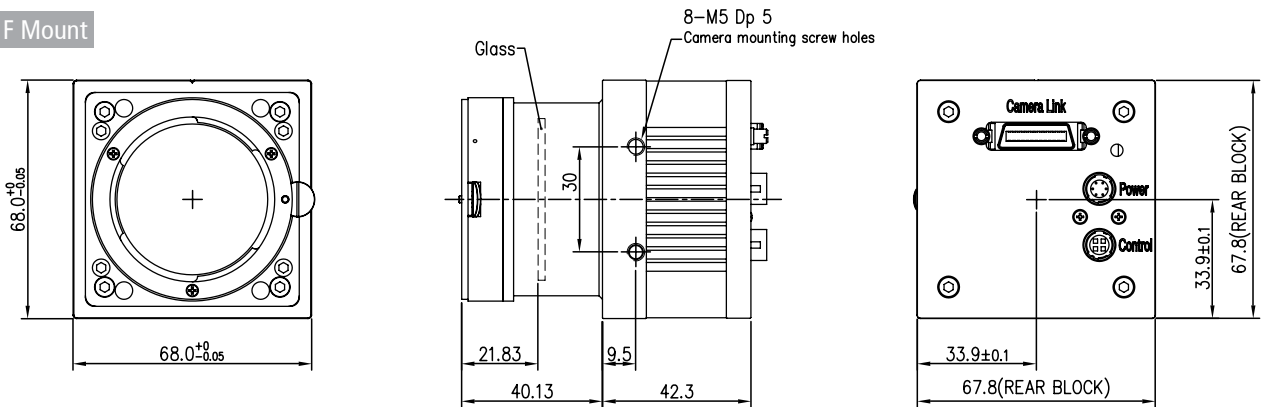
Mechanical Dimensions

Unit : mm

C Mount



F Mount



For more information please contact local distributor or visit our website at www.viewworks.com

Reproduction in whole or in part without written permission is prohibited. Viewworks Co., Ltd. is not responsible for any technical or typographical errors and reserves the right to make changes to products, specifications and documentation without prior notice.

VMCB-VAC1-R001EN

Contact



10955 Avenida Del Gato
San Diego, CA 92126
Tel: (585) 627-1609
email: vst@visionsystech.com
www.visionsystech.com

ISO-9001, ISO-13485

Corporate Headquarters

Viewworks Co., Ltd. # 604 Suntechcity II, 307-2 Sangdaewon-dong, Jungwon-gu, Seongnam-city, Gyeonggi-do, 462-806 South Korea
tel +82-70-7011-6161 fax +82-31-737-4954 e-mail sales@viewworks.com web site <http://www.viewworks.com>