
VC-2MC-M/C 150/340

VC-3MC-M/C 280

VC-4MC-M/C 80/180

2, 3 & 4 MEGAPIXELS RESOLUTIONS, GLOBAL ELECTRONIC SHUTTER,
HIGH-SPEED CMOS DIGITAL CAMERA



VC Series is high-resolution CMOS digital cameras for machine vision. Equipped with the latest global shutter CMOS image sensor technology available today, these cameras offer not only high-speed image processing capabilities but also precise exposure control. Furthermore, its outstanding noise reduction technology and a wide range of camera resolutions make these cameras ideal for use in various industrial inspection and scientific research applications.

VIEWORKS

VC-2MC / VC-3MC / VC-4MC

2, 3 & 4 MEGAPIXELS RESOLUTIONS, GLOBAL ELECTRONIC SHUTTER, HIGH-SPEED CMOS DIGITAL CAMERA

Main Features

- * 2M/3M/4M Resolutions
- * High-Speed Progressive Scan CMOS Image Sensor
- * Global Shutter CMOS Technology
- * Full Camera Link Interface with 8 bit or 10 bit Data Output
- * Excellent Noise Reduction
- * Field Upgradable Firmware
- * Pixel Defect Correction

Applications

- * Machine Vision Inspection
- * Research and Scientific Imaging
- * Microscopy and Metrology

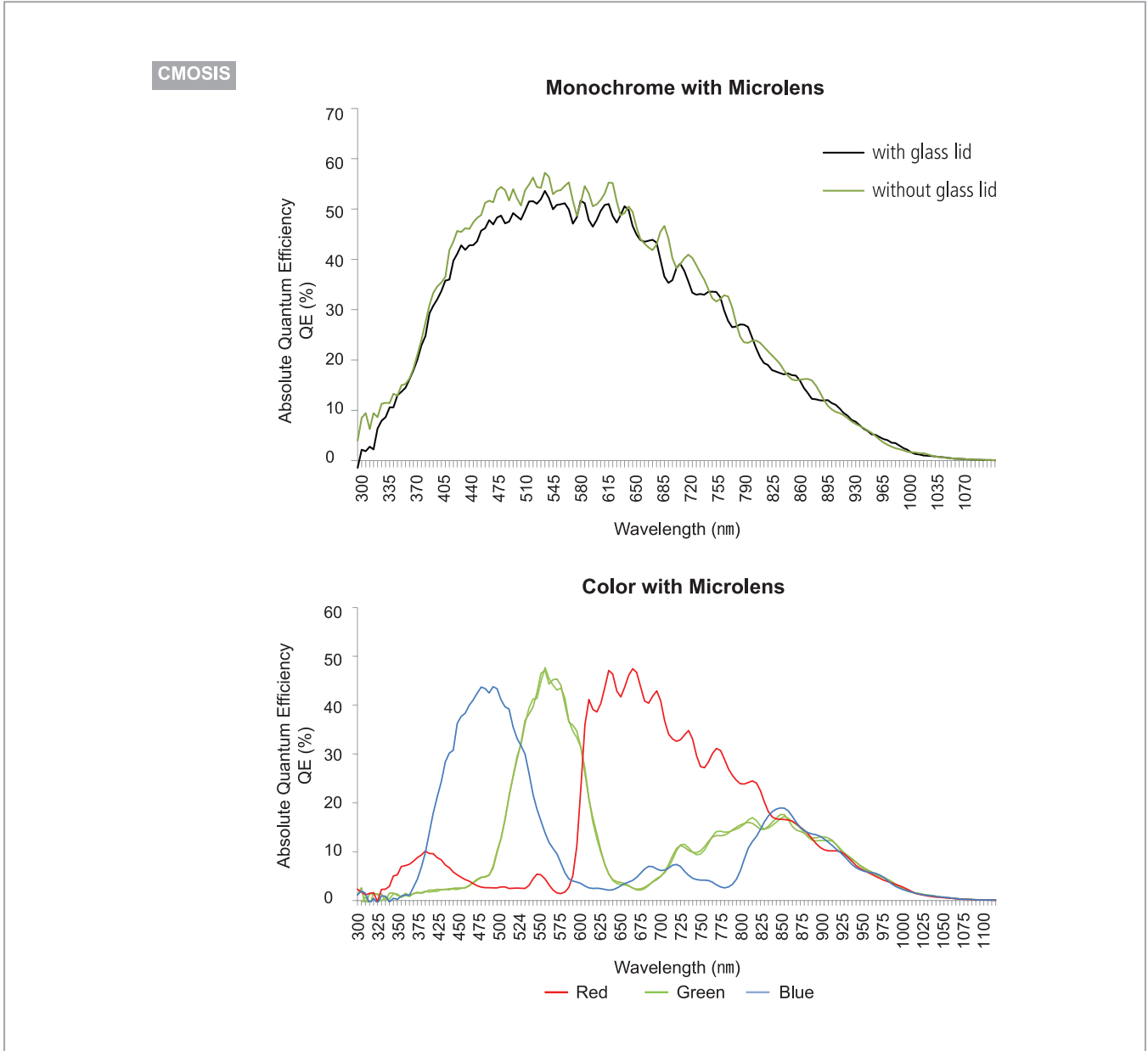
Specifications

Model	VC-2MC-M/C 150	VC-2MC-M/C 340	VC-3MC-M/C 280	VC-4MC-M/C 80	VC-4MC-M/C 180
Resolution (H × V)	2048 × 1088		1696 × 1710	2048 × 2048	
Sensor	CMOSIS CMV 2000		On Semiconductor LUPA 3000	CMOSIS CMV 4000	
Sensor Size (Optical Format)	11.26 mm × 5.98 mm (2/3")		13.57 mm × 13.68 mm (1")	11.26 mm × 11.26 mm (1")	
Sensor Type	High Speed CMOS Image Sensor				
Pixel Size	5.5 μm × 5.5 μm		8.0 μm × 8.0 μm	5.5 μm × 5.5 μm	
Interface	Camera Link				
Max. Frame Rate	2 Tap: 74.4 fps 4 Tap: 148.5 fps		2 Tap: N/A 4 Tap: N/A	2 Tap: 39.6 fps 4 Tap: 78.9 fps	
	8 Tap: N/A 10 Tap: N/A	8 Tap: 295.4 fps 10 Tap: 337.6 fps	8 Tap: 227 fps 10 Tap: 284 fps	8 Tap: N/A 10 Tap: N/A	8 Tap: 157.1 fps 10 Tap: 179.5 fps
Transfer Time	2 Tap: 13.44 ms 4 Tap: 6.73 ms		2 Tap: N/A 4 Tap: N/A	2 Tap: 25.3 ms 4 Tap: 12.67 ms	
	8 Tap: N/A 10 Tap: N/A	8 Tap: 3.38 ms 10 Tap: 2.96 ms	8 Tap: 4.41 ms 10 Tap: 3.51 ms	8 Tap: N/A 10 Tap: N/A	8 Tap: 6.37 ms 10 Tap: 5.58 ms
Pixel Data Format	8 bit (2/4 Tap) 10 bit (2/4 Tap)	8 bit (2/4/8/10 Tap) 10 bit (2/4/8 Tap)	8 bit (8/10 Tap)	8 bit (2/4 Tap) 10 bit (2/4 Tap)	8 bit (2/4/8/10 Tap) 10 bit (2/4/8 Tap)
Electronic Shutter	Global Shutter				
Data Output Pixel Clock Speed	85 MHz				
Trigger Mode	Free-Run, Trigger Programmable Exposure Time and Trigger Polarity				
Dynamic Range	60 dB				
Dimension / Weight	68 mm × 68 mm × 54 mm, 373 g (with C-mount)				
Temperature	Operating: 0°C ~ 40°C, Storage: -40°C ~ 70°C				
Lens Mount	C or F-mount				
Power	10 ~ 14 V DC Typ. 4 W	10 ~ 14 V DC Typ. 4 W	10 ~ 14 V DC Typ. 5 W	10 ~ 14 V DC Typ. 4 W	10 ~ 14 V DC Typ. 4 W
Compliance	CE, FCC, KC (Application of VC-3MC in preparation)				
Configuration Software	Configurator				

VC-2MC / VC-3MC / VC-4MC

2, 3 & 4 MEGAPIXELS RESOLUTIONS, GLOBAL ELECTRONIC SHUTTER, HIGH-SPEED CMOS DIGITAL CAMERA

Quantum Efficiency Curves



Ordering Scheme

<p>Series VC Series</p> <hr/> <p>Sensor Resolution 2M - 2 Megapixels 3M - 3 Megapixels 4M - 4 Megapixels</p> <hr/> <p>Interface C - Camera Link</p>	<p>VC - 4M C - M 180 D0</p>	<p>Sensor Options D0 - On Semiconductor E0 - CMOSIS</p> <hr/> <p>Frame Rate 80 - 80 fps 150 - 150 fps 180 - 180 fps 280 - 280 fps 340 - 340 fps</p> <hr/> <p>Mono / Color M - Monochrome C - Color</p>
---	------------------------------------	--

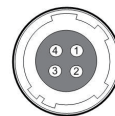
Connector Specification

Power



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

Control



1: Trigger IN+, 2: Trigger IN-
3: DC Ground, 4: Strobe OUT+
(HR10A-7R-4S)

Connectors on camera body

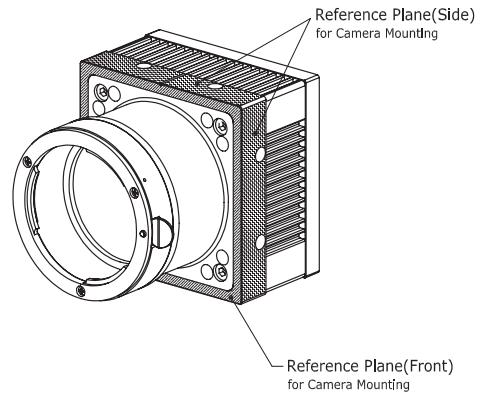
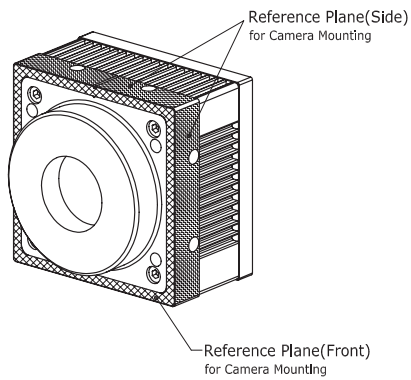
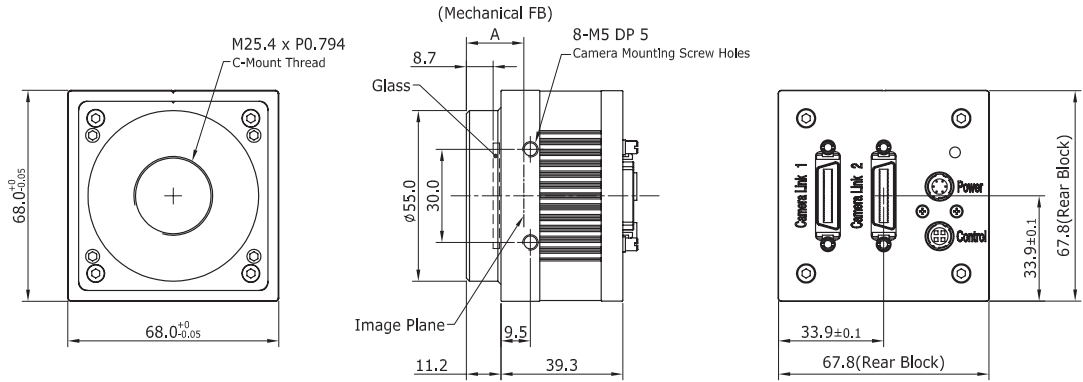
VC-2MC / VC-3MC / VC-4MC

2, 3 & 4 MEGAPIXELS RESOLUTIONS, GLOBAL ELECTRONIC SHUTTER, HIGH-SPEED CMOS DIGITAL CAMERA

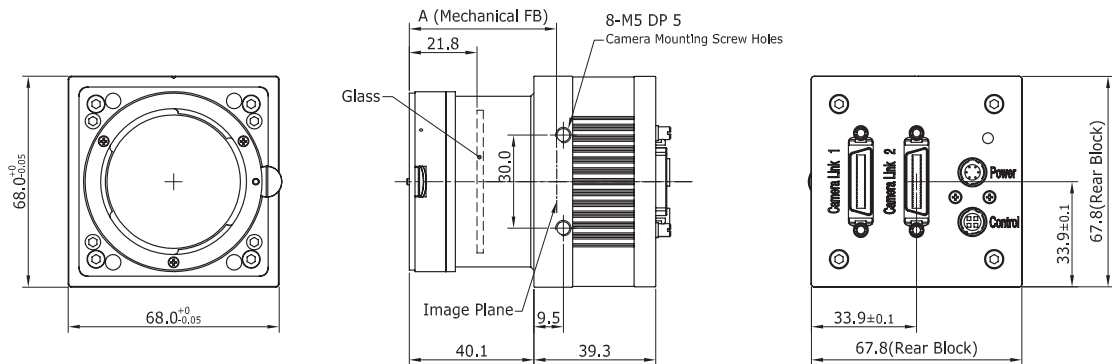
Mechanical Dimensions

Unit: mm

C-mount for VC-2MC, VC-3MC, VC-4MC



F-mount for VC-2MC, VC-3MC, VC-4MC



For more information please contact local distributor or visit our website at <http://www.vieworks.com>.

Reproduction in whole or in part without written permission is prohibited. Vieworks 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.

RA14-137-027

VIEWORKS

41-3, Burim-ro 170 beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055 Republic of Korea
 tel +82-70-7011-6161 fax +82-31-386-8631 e-mail sales@vieworks.com