
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.

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

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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

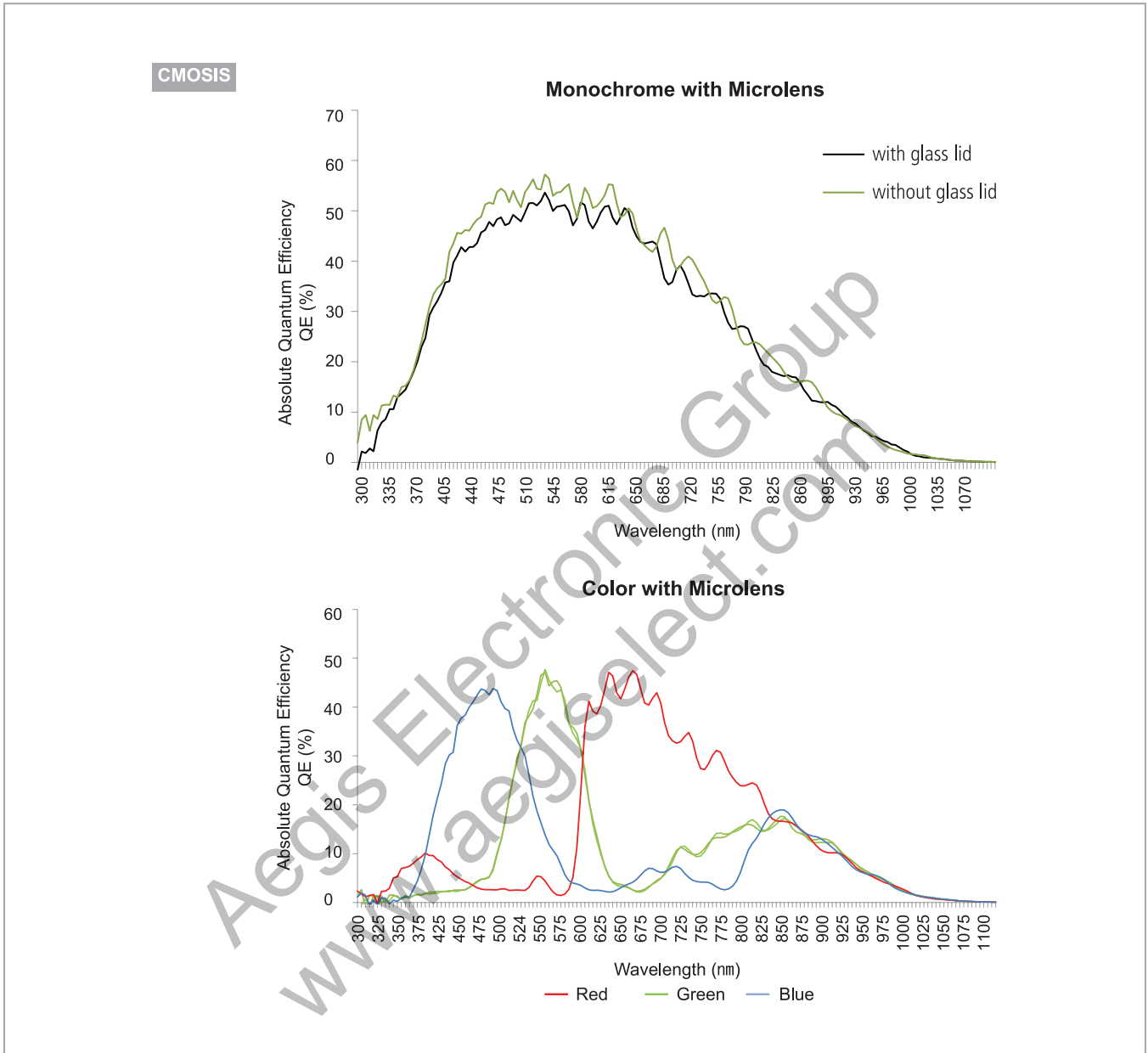
Specifications

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		2 Tap: N/A	2 Tap: 39.6 fps	
	4 Tap: 148.5 fps		4 Tap: N/A	4 Tap: 78.9 fps	
	8 Tap: N/A	8 Tap: 295.4 fps	8 Tap: 227 fps	8 Tap: N/A	8 Tap: 157.1 fps
	10 Tap: N/A	10 Tap: 337.6 fps	10 Tap: 284 fps	10 Tap: N/A	10 Tap: 179.5 fps
Transfer Time	2 Tap: 13.44 ms		2 Tap: N/A	2 Tap: 25.3 ms	
	4 Tap: 6.73 ms		4 Tap: N/A	4 Tap: 12.67 ms	
	8 Tap: N/A	8 Tap: 3.38 ms	8 Tap: 4.41 ms	8 Tap: N/A	8 Tap: 6.37 ms
	10 Tap: N/A	10 Tap: 2.96 ms	10 Tap: 3.51 ms	10 Tap: N/A	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

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Quantum Efficiency Curves



Ordering Scheme

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

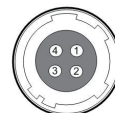
Connector Specification

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

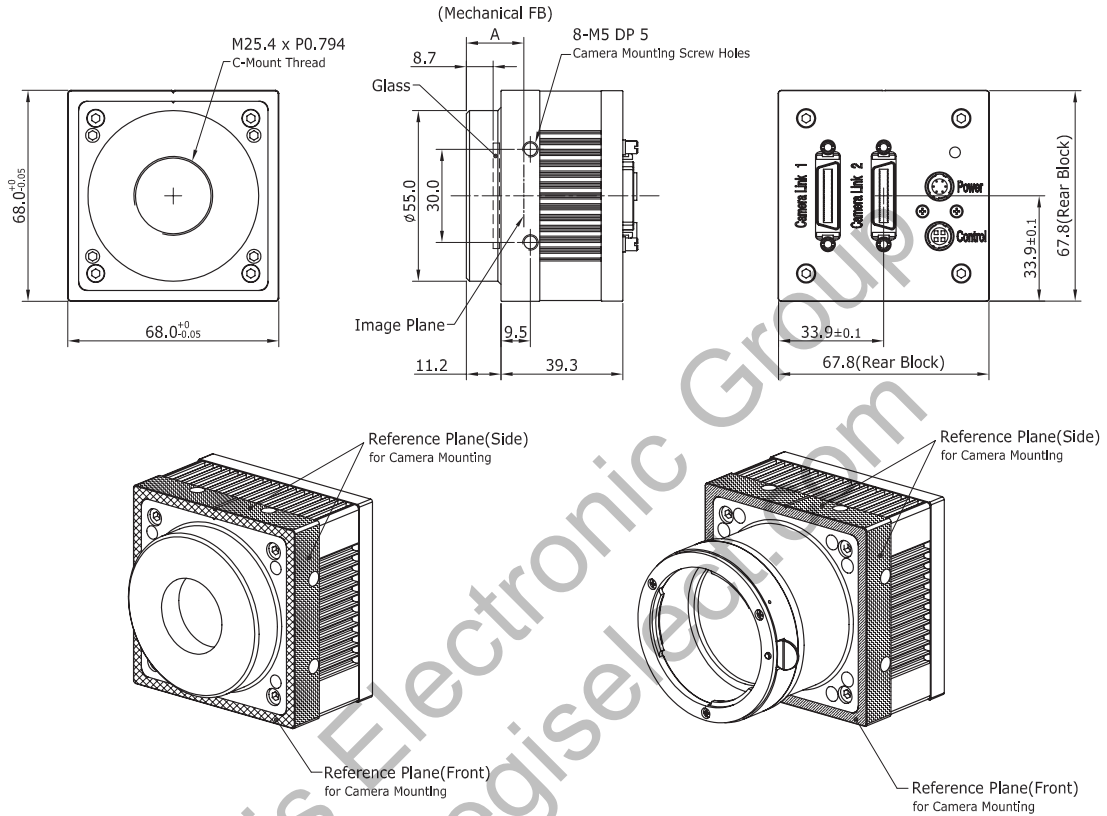
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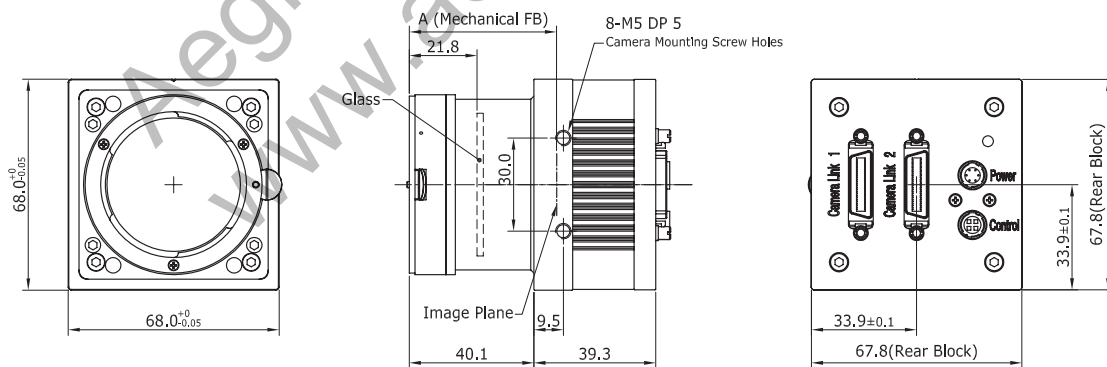
Mechanical Dimensions

Unit: mm

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



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



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