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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

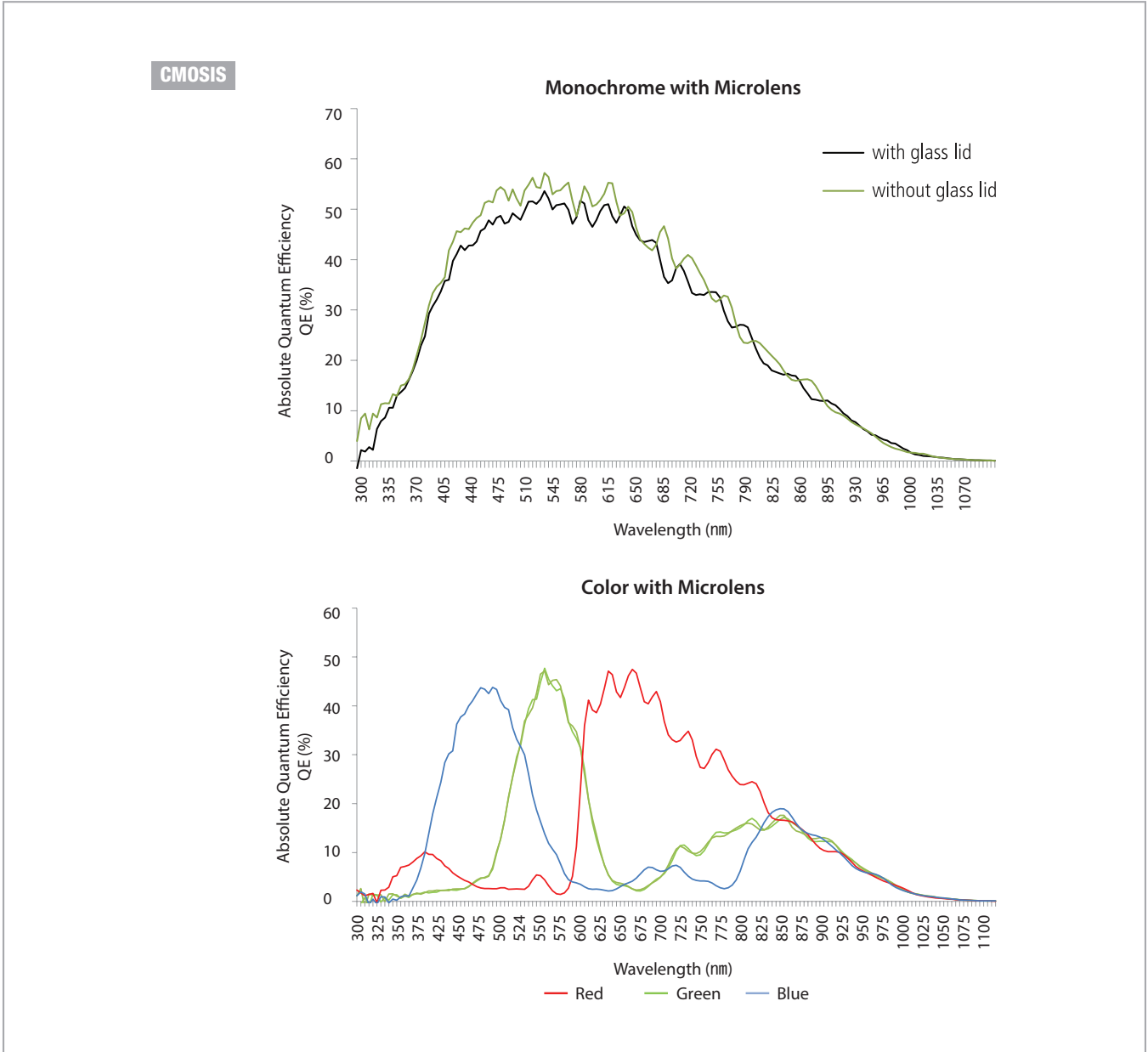
## Specifications

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 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, MAX. 6 W				
Compliance	CE, FCC, KC (Application of VC-3MC in preparation)				
Configuration Software	Configurator				

# VC-12MC / VC-25MC

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## Quantum Efficiency Curves



## Ordering Scheme

<b>VC - 4M C - M 180 D0</b>	
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

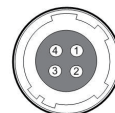
## Connector Specification

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

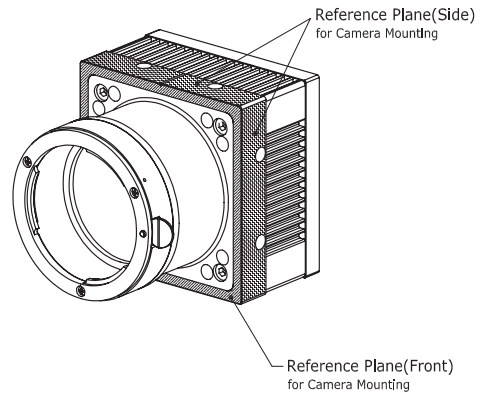
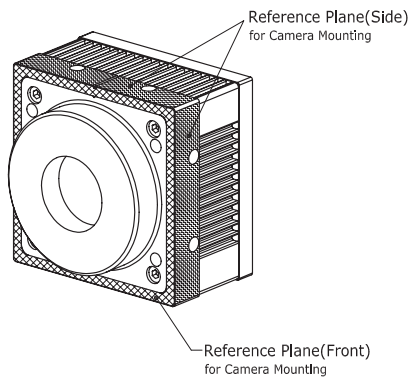
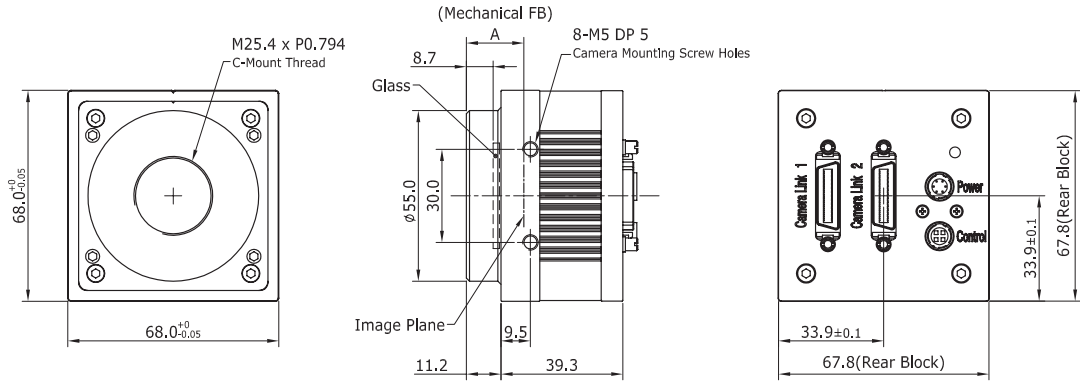
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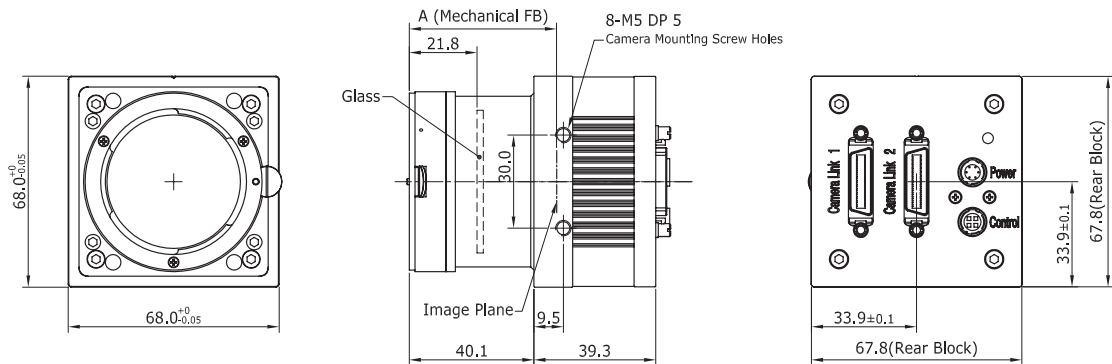
## Mechanical Dimensions

Unit: mm

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



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



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