



vieworks

VC-2MC-M/C 340 VC-4MC-M/C 180

2 & 4 MEGA PIXEL RESOLUTION, GLOBAL ELECTRONIC SHUTTER,
HIGH-SPEED CMOS DIGITAL CAMERAS



VC-2MC-M/C340 & VC-4MC-M/C180 are high-speed CMOS digital cameras with up to 340 and 180 frames per second at maximum resolutions. Equipped with high speed image processing it provides flexible selection in resolution and speed meeting the requirements of various industrial and scientific applications. Its global electronic shutter mechanism with exposure time down to $1\mu\text{s}$ enables users to capture objects in fast movement at high definition in free run and trigger mode.

Main Features

- * 2M/ 4M Mega Pixel Resolution
- * CMOSIS High-Speed Progressive Scan CMOS Image Sensor
- * Global Electronic shutter
- * Full Camera Link Interface with 8 bit Data Output
- * Fixed Pattern Noise Correction
- * Field Upgradable Firmware
- * Defective Pixel Compensation

Applications

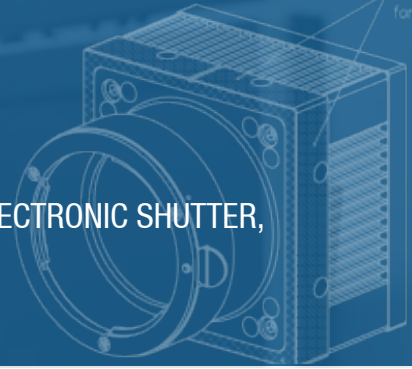
- * Machine Vision Inspection
- * Research and Scientific Imaging
- * Intelligent Transport System
- * Microscopy and Metrology

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VC-2MC-M/C 340 VC-4MC-M/C 180

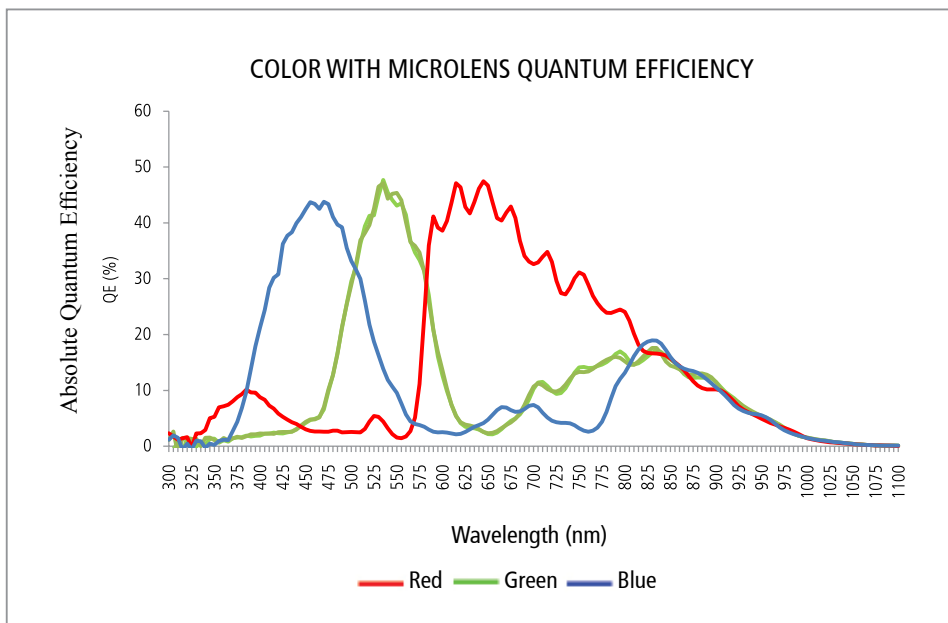
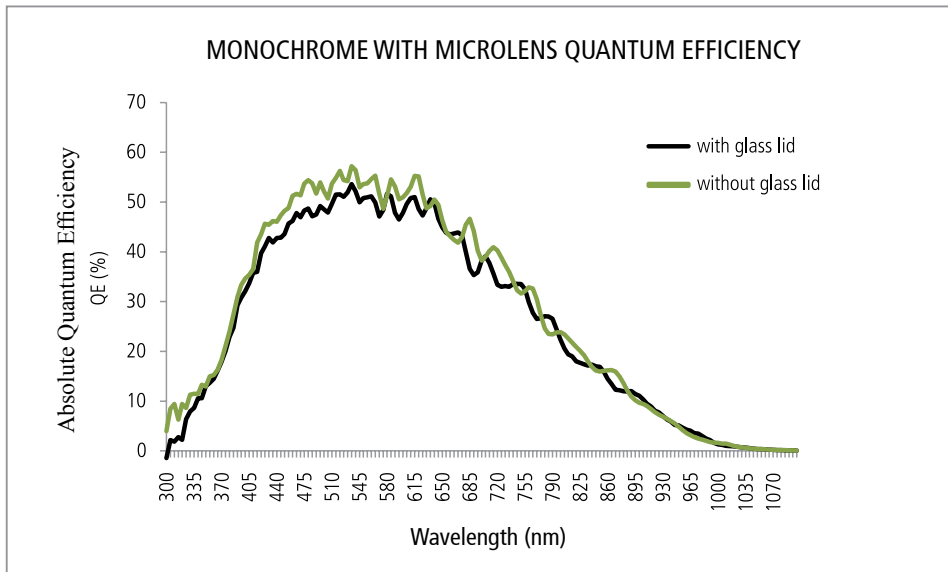
2 & 4 MEGA PIXEL RESOLUTION, GLOBAL ELECTRONIC SHUTTER,
HIGH-SPEED CMOS DIGITAL CAMERAS



Specifications

Model	VC-2MC-M/C 340	VC-4MC-M/C 180
Imaging Device	CMOSIS CMV 2000 CMOS sensor	CMOSIS CMV 4000 CMOS sensor
Active Image Pixels	2048(H) X 1088(V)	2048(H) X 2048(V)
Pixel Size	5.5 μ m \times 5.5 μ m	
Active Image Area	11.26 \times 5.63 mm (Diagonal : 12.6 mm)	11.26 \times 11.26 mm (Diagonal : 15.92 mm)
Sensor Clock Rate	85 MHz	
Data Output	8 bit	
Camera Interface	Full Camera-Link : CC1	
Max. Frame Rate (at full Image)	2 Taps (Base) : 75 FPS 4 Taps (Medium) : 150 FPS 8 Taps (Full) : 300 FPS 10 Taps (Full) : 340 FPS	2 Taps (Base) : 39.5 FPS 4 Taps (Medium) : 78.9 FPS 8 Taps (Full) : 157.0 FPS 10 Taps (Full) : 179.2 FPS
Transfer Time (at full Image)	2 Taps (Base) : 13.3 ms 4 Taps (Medium) : 6.7 ms 8 Taps (Full) : 3.3 ms 10 Taps (Full) : 2.94 ms	2 Taps (Base) : 25.3 ms 4 Taps (Medium) : 12.67 ms 8 Taps (Full) : 6.37 ms 10 Taps (Full) : 5.58 ms
Exposure Time	1 μ s ~ 7s	
Exposure Control	Global Electronic shutter	
Gain Control	Range: 0~ 12 dB, 64-step Gain Control	
Offset Control	Range: 0-63dB, 64-step Offset Control	
Trigger Mode	Mode (free run, trigger), Programmable exposure, Programmable trigger polarity	
External Trigger	External Port : 3.3 – 5.0V Logic level input, optically isolated.	
Dynamic Range	60 dB	
Lens Mount	C-Mount or F-Mount	
Power Requirements	12 VDC \pm 20% MAX 6.0 W @ 12 V DC	
Connectors	Data Transfer/ Communication : Two, 26 pin, Female MDR connector Power : 6 pin, Hirose HR connector, Control : 4 pin, Hirose HR connector	
Environmental	0 $^{\circ}$ C ~ 40 $^{\circ}$ C, storage : -30 $^{\circ}$ C ~ 65 $^{\circ}$ C	
Mechanical Spec.	68 mm x 68 mm x 54 mm, 420 g (With C-mount)	



Quantum Efficiency Curves



Ordering Scheme

VC - 2MC - M340EO	
Series	Sensor Option
VC series	EO - CMOSIS
Sensor Resolution	Frame Rate
2M - 2 megapixels 4M - 4 megapixels	340 - 340 fps 180 - 180 fps
Interface	Mono / Color
C - Camera Link	M - Monochrome C - Color

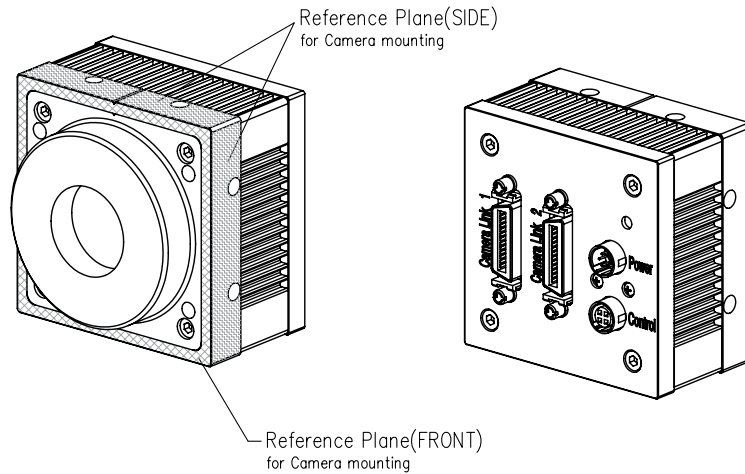
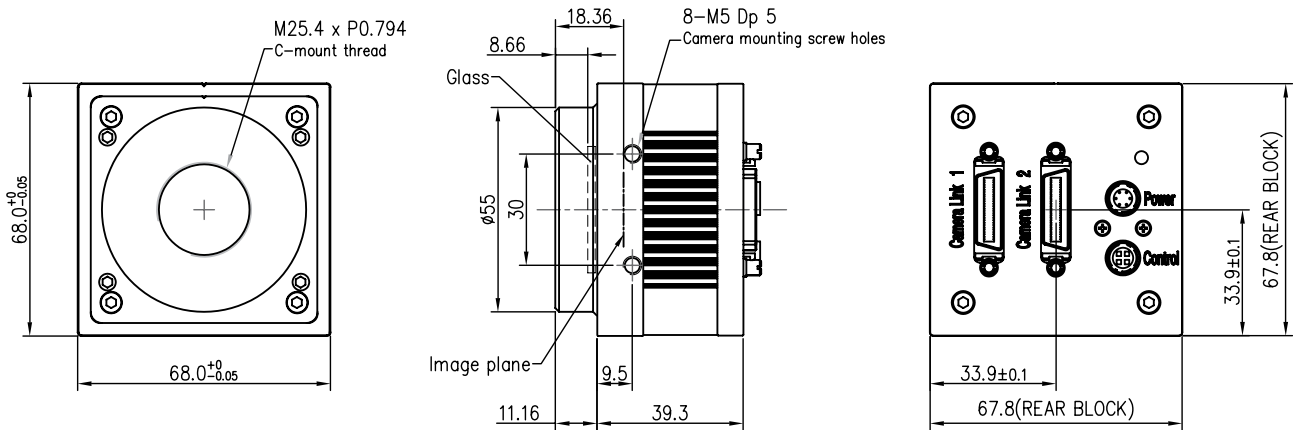
Connector Specifications

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



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

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ISO-9001, ISO-13485

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