

# VC-5MC-M/C110H

5 Megapixel High Speed CMOS Digital Camera



The VC-5MC-M/C110H cameras, the latest model of the industrial proven VC series, are new 5-megapixel cameras with the Camera Link interface.

The VC-5MC-M/C110H cameras use the latest CMOS global shutter image sensor(IMX547) technology from Sony. It offers up to 109.5 frames per second at 2,448 × 2,048 resolution. These combinations of high resolution, high speed and global shutter set a new standard for industrial, scientific and surveillance digital imaging applications. Equipped with the Viewworks' innovative technologies proved by world's top FPD manufacturers, the VC-5MC-M/C110H cameras offer not only highly uniformed images but also high speed image processing capabilities. Featured with high quality image uniformity and high resolution, the cameras are ideal for wide range of demanding applications such as FPD, PCB and semiconductor inspections.

**VIEWWORKS**

[vision.viewworks.com](http://vision.viewworks.com)

# VC-5MC-M/C110H

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## Main Features

- High Speed 5 Megapixel CMOS Image Sensor
- Camera Link Full Interface up to 109.5 fps
- Power over Camera Link (PoCL)
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- GenICam Compatible – XML based Control

## Applications

- Flat Panel Display Inspection
- Electronics Inspection
- Semiconductor Inspection
- Document / Film Scanning
- Factory Automation, Robotics or AOI

## Specifications

Model	VC-5MC-M/C110H	
Resolution (H × V)	2,448 × 2,048	
Sensor	Sony IMX547	
Sensor Size (Diagonal)	Type1/1.8 (8.8 mm)	
Sensor Type	High Speed CMOS Image Sensor	
Pixel Size	2.74 $\mu\text{m}$ × 2.74 $\mu\text{m}$	
Interface	Camera Link Base/Medium/Full/10-Tap, 26-pin SDR Connectors	
Max. Frame Rate (8 bit)	2 Tap: 31.0 fps 4 Tap: 61.2 fps 8 Tap: 109.5 fps 10 Tap: 109.5 fps	
Exposure Time (1 $\mu\text{s}$ step)	1 $\mu\text{s}$ – 60 s	
Partial Scan (Max. Speed)	1374.1 fps at 16 Lines (8 bit)	
Pixel Data	Mono	Mono 8/10/12 bit
Format	Color	RG Bayer 8/10/12 bit
Electronic Shutter	Global Shutter	
Digital Gain	1 × ~ 32 ×	
Black Level Control	0 – 255 LSB at 12 bit (1 LSB step)	
Exposure Mode	Free-Run, Timed, Trigger Width	
External Trigger	3.3 V ~ 24.0 V, 10 mA, Logical Level Input Optically Isolated	
Software Trigger	Asynchronous, Programmable via Camera API	
Dynamic Range	Typical 71 dB	
Dimension / Weight	40.0 mm × 40.0 mm × 50.0 mm, 125 g (C-mount)	
Temperature	Operating: 0°C ~ 40°C, Storage: -40°C ~ 70°C	
Lens Mount	C-mount	
Power	External	11 ~ 24 V DC
	Dissipation	Typical: 5 W, Maximum: 6 W
Compliance	CE, FCC, KC	

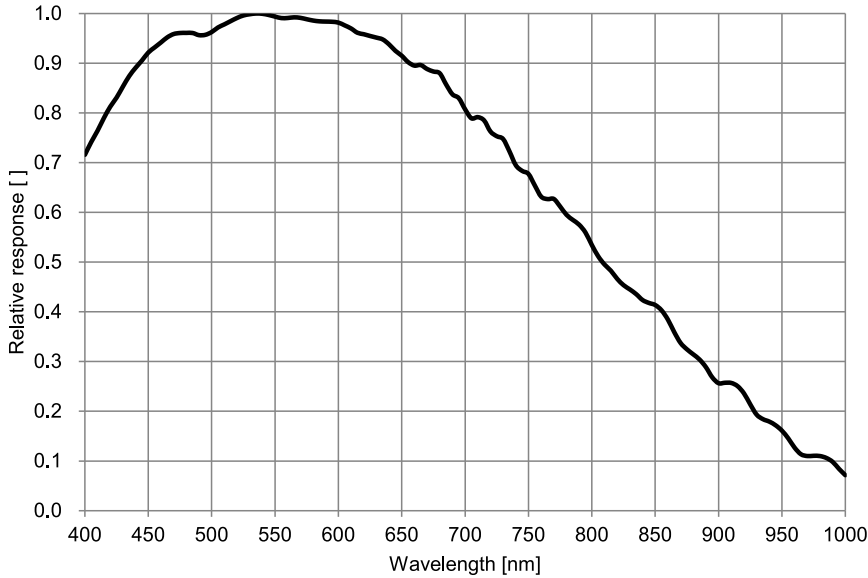
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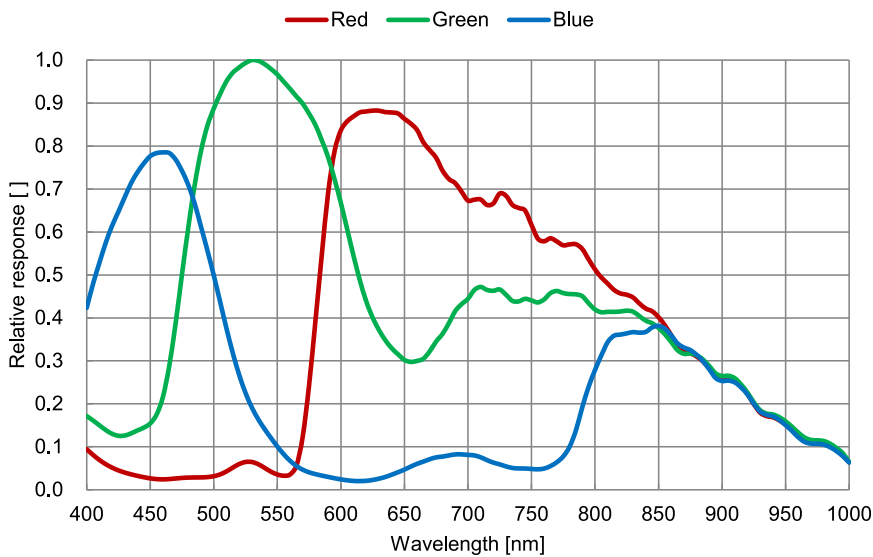
## Spectral Response

\* The sensitivity data may not match the measurement on the finished product necessarily because it is measured based on the wafer.

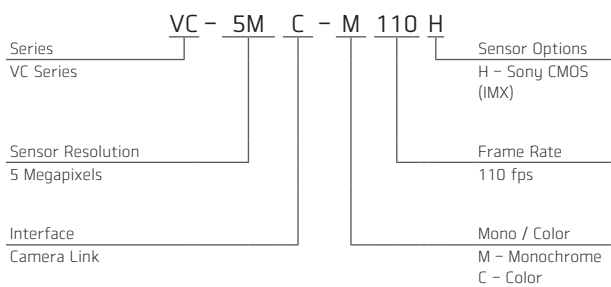
### Monochrome\*



### Color\*

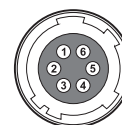


## Ordering Scheme



## Connector Specification

Power / Control



- 1: +12V DC
- 2: Trigger IN+
- 3: Trigger IN-
- 4: Output+
- 5: Output- (HR10A-7R-6PB)
- 6: DC Ground

Connectors on Camera Body

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## Mechanical Dimensions

Unit: mm

