

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.

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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 μm × 2.74 μm
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 μs step)		1 μs – 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

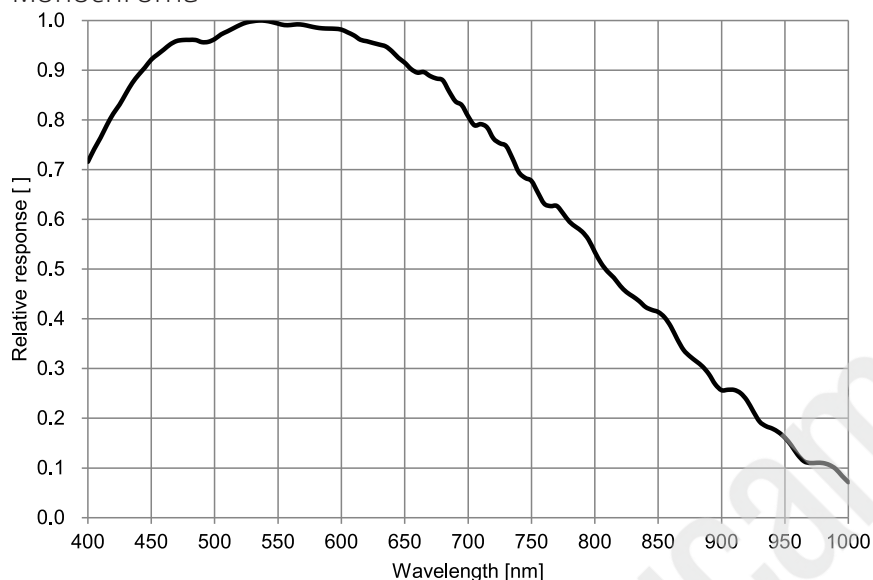
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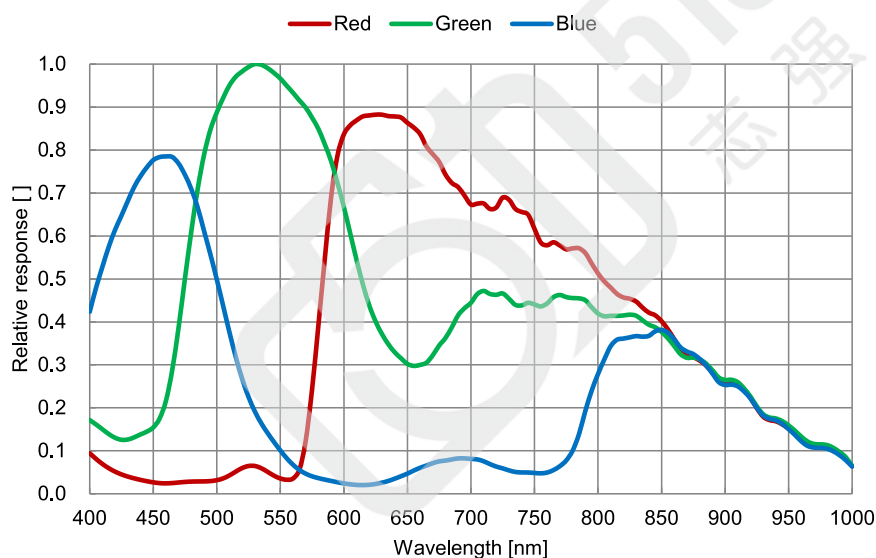
Spectral Response

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

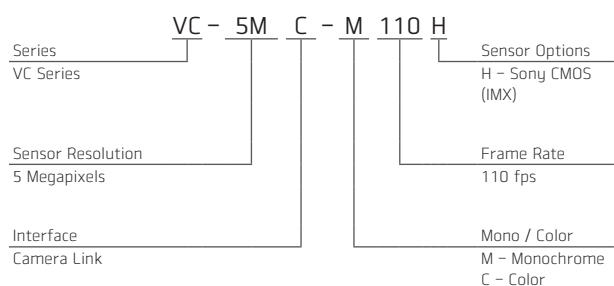
Monochrome*



Color*

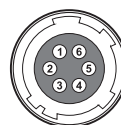


Ordering Scheme



Connector Specification

Power / Control



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

Connectors on Camera Body

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Mechanical Dimensions

Unit: mm

