

# VC-127MC-M/C6H

Ultra High Resolution CMOS Digital Camera



The VC-127MC-M/C6H, the latest model of the industrial proven VC series, is a new 127-megapixel resolution CMOS cameras available with the Camera Link interface. The camera is based on the CMOS global shutter image sensor technology (IMX661) from Sony. The VC-127MC-M/C6H offers up to 6.2 frames per second at  $13376 \times 9528$  resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-127MC-M/C6H camera offers not only highly uniformed images but also high-speed image processing capabilities.

Featured with high-quality image uniformity and high-resolution, this camera is ideal for demanding applications such as FPD, PCB and semiconductor inspections.

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## Main Features

- 127-Megapixel Resolution
- Camera Link Full Interface
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction with Sequencer Control
- Hot Pixel Correction
- Defective Pixel Correction

## Applications

- Flat Panel Display Inspection
- Electronics Inspection
- Semiconductor Inspection
- Document / Film Scanning

## Specifications

Model		VC-127MC-M/6H
Resolution (H × V)		13376 × 9528
Sensor		SONY IMX661
Sensor Size (Diagonal)		46.15 mm × 32.87 mm (56.73 mm)
Pixel Size		3.45 $\mu\text{m}$ × 3.45 $\mu\text{m}$
Interface		Camera Link Base / Medium / Full / 10 Tap, 26-pin SDR Connector
Max. Frame Rate (8 bit)	2-taps	1.2 fps
	4-taps	2.5 fps
	8-taps	5.0 fps
	10-taps	6.2 fps
Exposure Time (1 $\mu\text{s}$ step)		1 $\mu\text{s}$ – 60 s
Binning	Sensor (12, 14 bit)	Horizontal and Vertical Dependent: ×1, ×2
	Logic	Horizontal and Vertical Independent: ×1, ×2, and ×4(Mono Only)
Pixel Data Format	Monochrome	Mono 8/10/12 bit
	Color	RG Bayer 8/10/12 bit
Electronic Shutter		Global Shutter
Exposure Mode		Timed, Trigger Width
Dynamic Range		72.7 dB at 12 bit
Gain Control	Analog	1 × ~ 12 ×
	Digital	1 × ~ 32 ×
Black Level Control		0 ~ 255 LSB at 12 bit
Dimension / Weight		100 mm × 100 mm × 81 mm, 1.01 kg (with M-72 mount)
Temperature		Operating: 0°C ~ 40°C, Storage: -40°C ~ 70°C
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger, UserOutput0, CC1, Timer
External Trigger		3.3 V ~ 24.0 V, 10 mA, Logical Level Input, Optically Isolated
Software Trigger		Asynchronous, Programmable via Camera API
Lens Mount		M72-mount, Custom mount available upon request
Power	External	11 ~ 24 V DC
	Dissipation	Typ. 25.5 W
Compliance		CE, FCC, KC

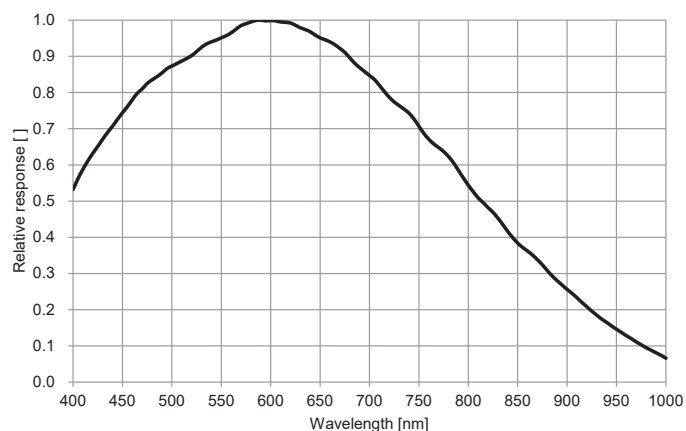
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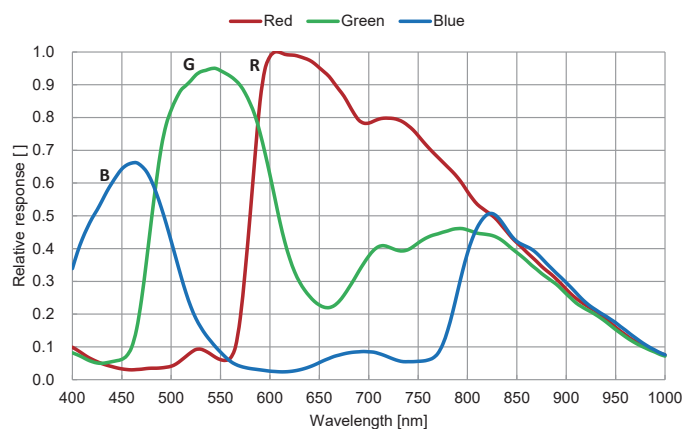
## Relative Sensitivity Curves

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

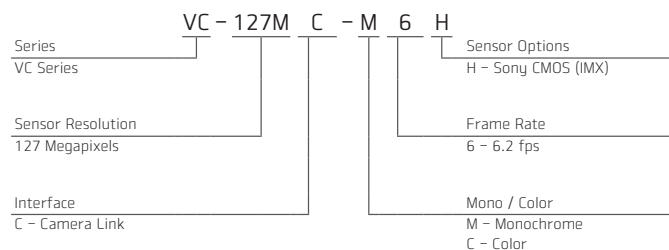
### IMX661 Monochrome



### IMX661 Color



## Ordering Scheme



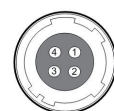
## Connector Specification

### 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-4S)

Connectors on camera body

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## Mechanical Dimensions

Unit: mm

