# 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.



### **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

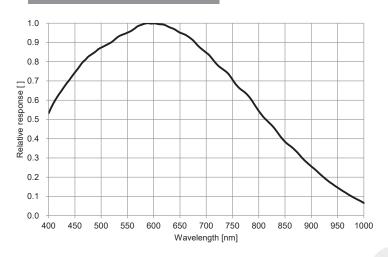
# **Specifications**

Model		VC-127MC-M/6H
Resolution (H $ imes$ V)		13376 × 9528
Sensor		SONY IMX661
Sensor Size (Diagonal)		$46.15 \text{ mm} \times 32.87 \text{ mm} (56.73 \text{ mm})$
Pixel Size		$3.45~\mu\mathrm{m}~ imes~3.45~\mu\mathrm{m}$
Interface		Camera Link Base / Medium / Full / 10 Tap, 26-pin SDR Connector
	2-taps	1.2 fps
Max. Frame Rate (8 bit)	e 4-taps	2.5 fps
	8-taps	5.0 fps
	10-taps	6.2 fps
Exposure Time (1 $\mu$ s step)		1 μs - 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	Monochrome	Mono 8/10/12 bit
Format	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 $\times$ 100 mm $\times$ 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, UserOutputO, 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

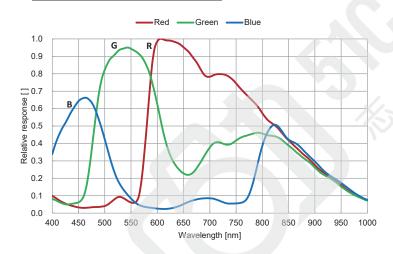
### VC-127MC-M/C6H

# Relative Sensitivity Curves • The sensitivity data may not match the measurement on the finished product necessarily because it is measured based on the wafer.

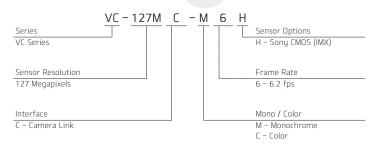
#### **IMX661 Monochrome**



#### **IMX661 Color**



## **Ordering Scheme**



## **Connector Specification**

Power



1, 2, 3: +12V DC 4, 5, 6: GND (HR10A-7R-6PB)

Control

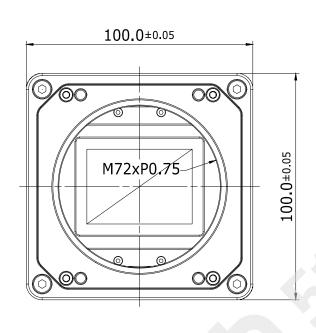


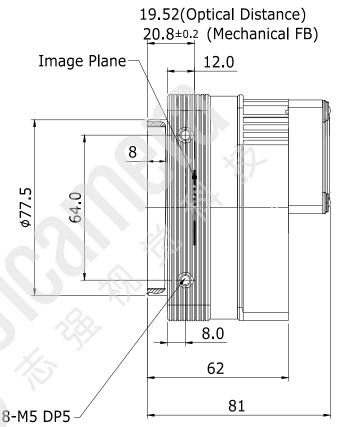
- 1: Trigger IN+
- 2: Trigger IN-
- 3: Strobe Out-(GND)
- 4: Strobe OUT+ (HR10A-7R-4S)

Connectors on camera body

### **Mechanical Dimensions**

Unit: mm





Camera Mounting Screw Holes

