

VP-127MC-M/C6H

127-Megapixel Thermoelectric Peltier Cooled Camera
with Camera Link Interface



The VP-127MC-M/C6H, the latest model of the industrial proven VP series, is a new 127-Megapixel resolution CMOS cameras available with the Camera Link interface. The camera adopts the cutting-edge High Speed CMOS Image Sensor. The VP-127MC-M/C6H camera offers up to 6.2 frames per second at 13,376 × 9,528 resolution. This camera uses thermoelectric Peltier (TEC) cooling technology developed for and used by many demanding medical market customers.

The TEC maintains the operating temperature of the image sensor at up to 15 degrees below ambient temperature. The VP-127MC-M/C6H camera provides a stable operating condition and the ability to expose for a long period of time to increase camera sensitivity. Featuring the stable operating capability and high resolution, this camera is ideal for demanding applications such as FPD, PCB and semiconductor inspections.

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VP-127MC-M/C6H

Ultra High Resolution CMOS Digital Camera

Main Features

- Thermoelectric Peltier Cooled – 15°C below
- 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		VP-127MC-M/C6H
Resolution (H × V)		13376 × 9528
Sensor		SONY IMX661
Sensor Size (Diagonal)		46.15 mm × 32.87 mm (56.73 mm)
Pixel Size		3.45 μm × 3.45 μm
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 μs step)		1 μs – 60 s
Binning	Sensor	Horizontal and Vertical Dependent: ×1, ×2
	Logic	Horizontal and Vertical Independent: ×1, ×2, and ×4(Mono Only)
Pixel Data Format	Monochrome	8/10/12 bit
	Color	RG Bayer 8/10/12 bit
Electronic Shutter		Global Shutter
Exposure Mode		Timed, Trigger Width
Dynamic Range		73 dB at 12 bit
Gain Control	Analog	1 × ~ 12 ×
	Digital	1 × ~ 32 ×
Black Level Control		0 ~ 255 LSB at 12 bit
Dimension / Weight		110 mm × 110 mm × 89 mm, 1.45 kg (with M-72 mount)
Cooling Performance		15±2°C below ambient temperature – Standard cooling with a fan
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
Lens Mount		M72-mount, Custom mount available upon request
Power	External	11 ~ 24 V DC
	Dissipation	Typ. 28.5 W
Compliance		CE, FCC, KC

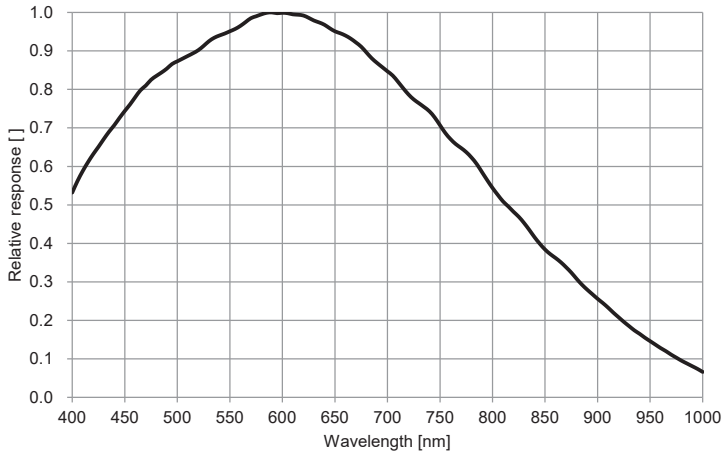
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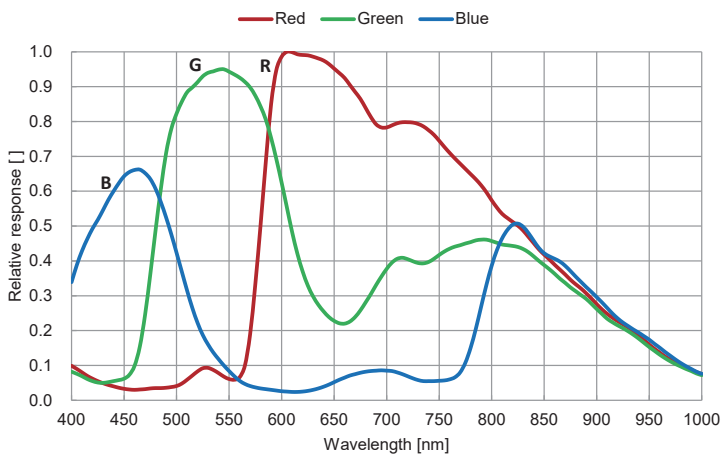
Relative Sensitivity Curves

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

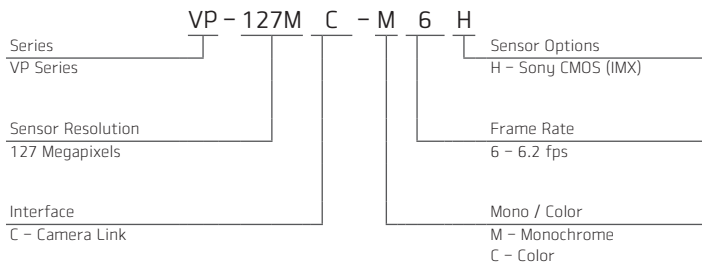
IMX661 Monochrome



IMX661 Color



Ordering Scheme



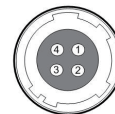
Connector Specification

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

