

VC-127MX2-M/C21H

Ultra High Resolution CMOS Digital Camera



CoaXPress®

The VC-127MX2-M/C21H, the latest model of the industrial proven VC series, is a new 127-megapixel CoaXPress camera and based on the CMOS global shutter image sensor technology (IMX661) from Sony. The VC-127MX2-M/C21H offers up to 21.9 frames per second at 13376 × 9528 resolution. The camera comes with the next generation CoaXPress 2.0 (CXP-12) interface delivering up to 50 Gigabits per second over four coaxial cables. These combinations of the CMOS sensor technology and CoaXPress 2.0 interface set a new standard for industrial, scientific and surveillance digital imaging applications. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-127MX2-M/C21H 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.

This information is brought to you by:

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Main Features

- 127-Megapixel Resolution
- CoaXPress 2.0 Interface up to 21.9 fps at 50 Gbps using 4 Channels
- Power over CoaXPress (PoCXP)
- 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-127MX2-M/C21H
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		CoaXPress 2.0 (CXP-6/10/12)
Max. Frame Rate		21.9 fps
Exposure Time (1 μs 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 Format	Monochrome	8/10/12/14 bit
	Color	RG Bayer 8/10/12/14 bit
Electronic Shutter		Global Shutter
Exposure Mode		Free-Run, Timed, Trigger Width
Dynamic Range		72.7 dB at 14 bit
Gain Control	Analog	1× ~ 12×
	Digital	1× ~ 32×
Black Level Control		0 ~ 1023 LSB at 14 bit
Dimension / Weight		100 mm × 100 mm × 79 mm, 1.07 kg (with M-72 mount)
Temperature		Operating: 0°C ~ 40°C, Storage: -40°C ~ 70°C
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger or CXP
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
	PoCXP	24 V DC, Minimum 2 of PoCXP cables required
Compliance		CE, FCC, KC
API SDK		Vieworks Imaging Solution 7.X

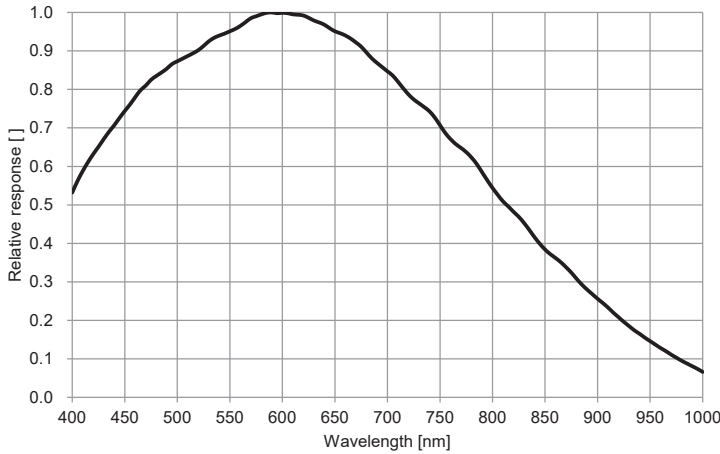
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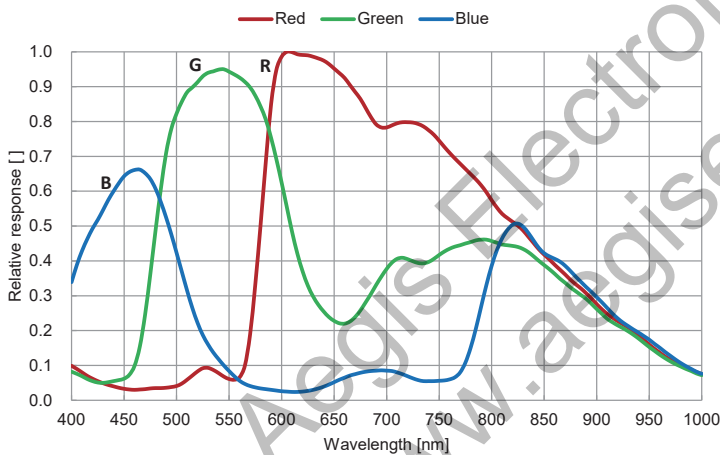
Relative Sensitivity Curves

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

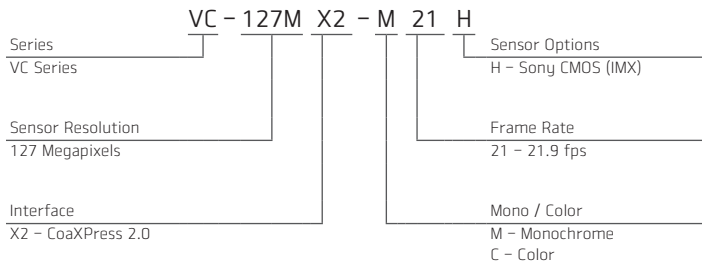
IMX661 Monochrome



IMX661 Color

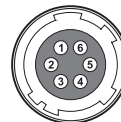


Ordering Scheme



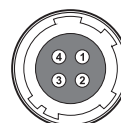
Connector Specification

Power



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

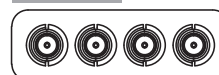
Control



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

Data Transfer / Communications

Micro-BNC



CH1 CH2 CH3 CH4

CH1: Master Connection
75 Ω, Micro-BNC (HD-BNC)

Connectors on camera body

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Mechanical Dimensions

Unit: mm

