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.

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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 ㎜ × 32.87 ㎜ (56.73 ㎜)
Pixel Size		3.45 ㎛ × 3.45 ㎛
Interface		CoaXPress 2.0 (CXP-6/10/12)
Max. Frame Rate	1 CH	8.8 fps
	2 CH	17.9 fps
	4 CH	21.9 fps
Exposure Time (1 ㎲ step)		1 ㎲ - 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		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 ㎜ × 100 ㎜ × 81 ㎜, 1.01 ㎏ (with M-72 mount)
Temperature		Operating: 0℃ ~ 40℃, Storage: -40℃ ~ 70℃
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger, UserOutput0, CXP, Timer
External Trigger		3.3 V ~ 24.0 V, 10 ㎃, 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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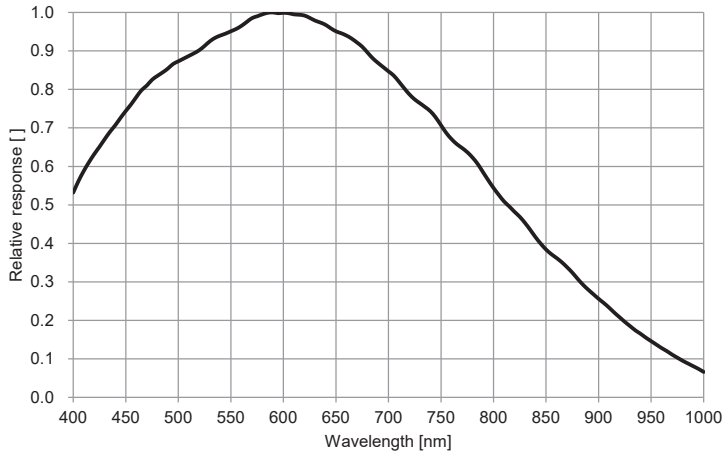
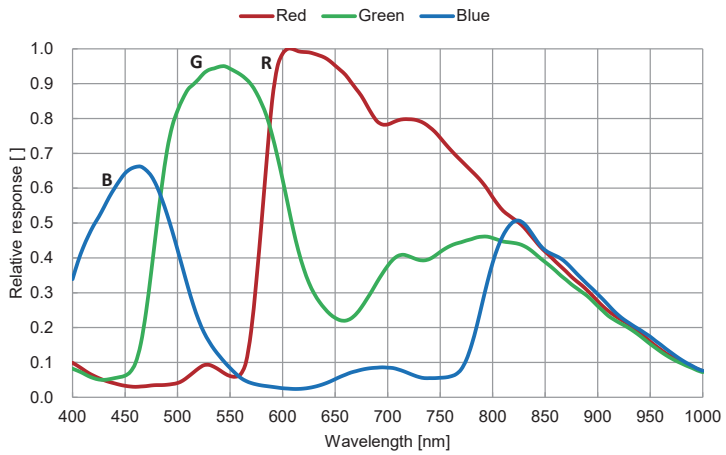
Relative Sensitivity Curves

* 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

VC - 127M X2 - M 21 H

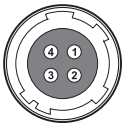
Series VC Series	Sensor Options H – Sony CMOS (IMX)
Sensor Resolution 127 Megapixels	Frame Rate 21 – 21.9 fps
Interface X2 – CoaXPress 2.0	Mono / Color M – Monochrome C – Color

Connector Specification

Power

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

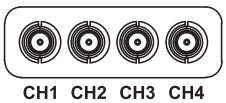
Control



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

Data Transfer / Communications

Micro-BNC

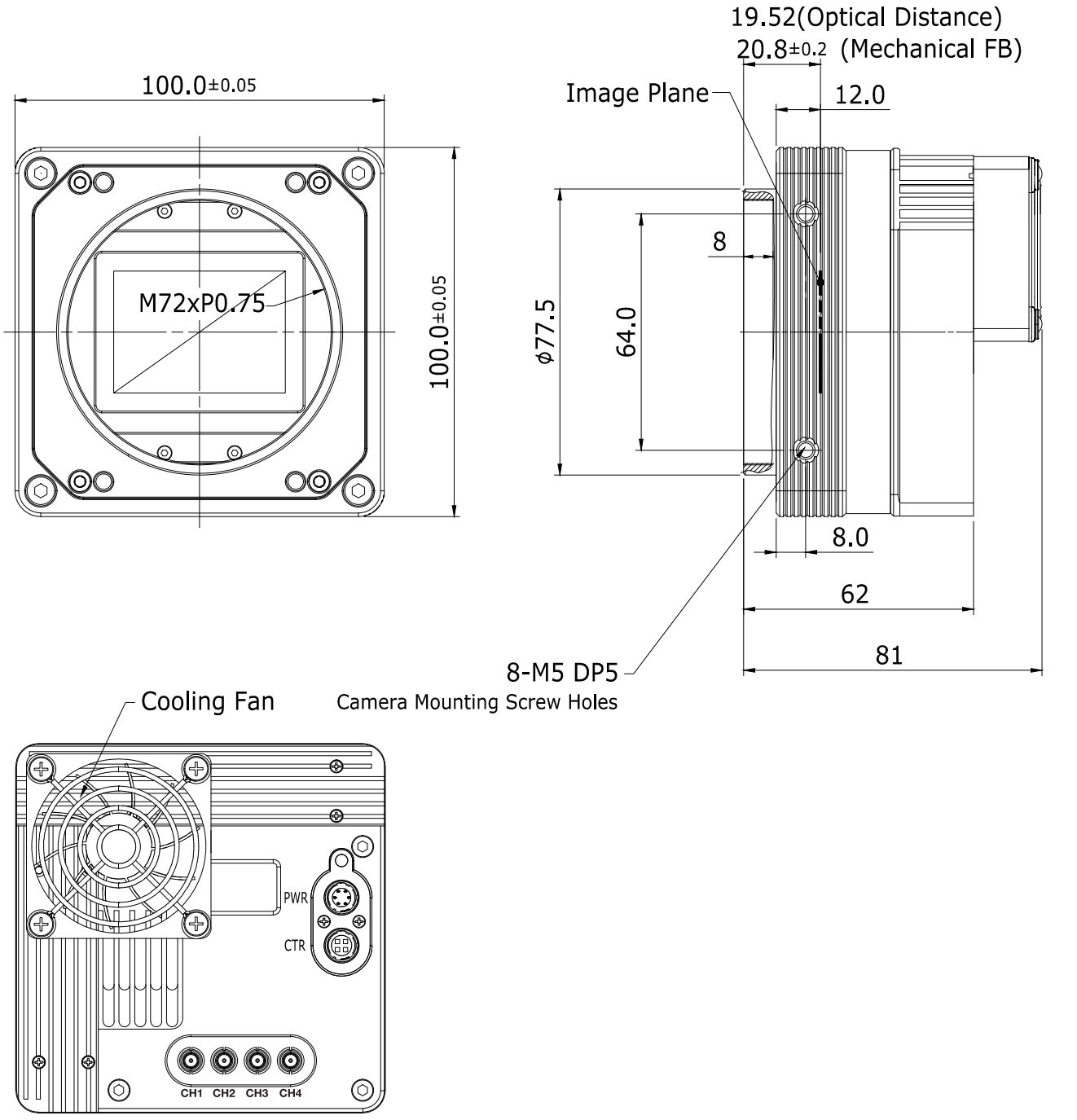


CH1: Master Connection
75 Ω , Micro-BNC (HD-BNC)

Connectors on camera body

Mechanical Dimensions

Unit: mm



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