

MV-CH050-90Y1M/C

5 MP CMOS CoaXPress Area Scan Camera



GEN<i>i>CAM

Introduction

MV-CH050-90Y1M/C camera adopts Gpixel GMAX3405 sensor to provide high quality image. It uses 1-link CXP-12 interface to transmit non-compressed images in real time, and its max. frame rate can reach 164 fps in full resolution.

Key Feature

- Resolution of 2448 × 2048, pixel size of 3.4 μm × 3.4 μm.
- Adopts global shutter CMOS sensor to provide high dynamic range, SNR, and high-quality image.
- Adopts CXP-12 interface to transmit data.
- Supports Off, Once, and Continuous exposure modes.
- Compatible with CoaXPress Protocol, GenICam Standard, and third-party software based on the protocol and standard.

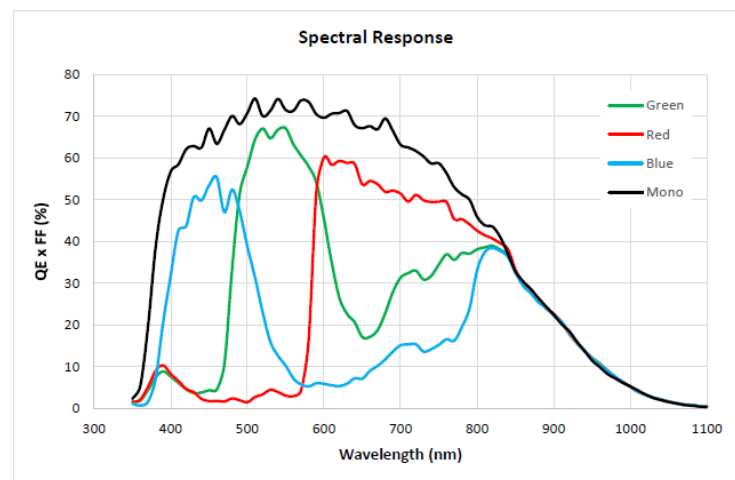
Available Model

- Mono camera: MV-CH050-90Y1M-NN
- Color camera: MV-CH050-90Y1C-NN

Applicable Industry

Electron semiconductor, PCB AOI, 3D application, motion capture, etc.

Sensor Quantum Efficiency



Specification

Model	MV-CH050-90Y1M	MV-CH050-90Y1C
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX3405	
Pixel size	3.4 μm \times 3.4 μm	
Sensor size	2/3"	
Resolution	2448 \times 2048	
Max. frame rate	164 fps @ 2448 \times 2048 Mono 8	164 fps @ 2448 \times 2048 Bayer GB 8
Dynamic range	59.7 dB	59.3 dB
SNR	39.3 dB	39.2 dB
Gain	0 dB to 6.1 dB	
Exposure time	2 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/12	Bayer GB 8/10/12
Binning	Supports 1 \times 1, 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \times 2, 4 \times 4	
Decimation	Supports 1 \times 1, 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \times 2, 4 \times 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical feature		
Data interface	CoaXPress with Micro-BNC interface	
Digital I/O	6-pin P7 connector provides power and I/O, including opto-isolated input \times 1 (Line 0), opto-isolated output \times 1 (Line 1), bi-directional non-isolated I/O \times 1 (Line 2)	
Power supply	9 VDC to 24 VDC, supports PoCXP	
Power consumption	Typ. 3.3 W @ 12 VDC	Typ. 3.5 W @ 12 VDC
Mechanical		
Lens mount	C-mount	
Dimension	29 mm \times 29 mm \times 42 mm (1.1" \times 1.1" \times 1.7")	
Weight	Approx. 90 g (0.2 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -10 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (14 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)	
Humidity	20% RH to 95% RH (no condensation)	
General		
Client software	MVS or third-party software meeting with CoaXPress Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, and 32/64-bit Linux	
Compatibility	CoaXPress, GenICam	
Certifications	CE, RoHS, KC	

Dimension

