

MV-CH250-90Y1M/C

25 MP 1.1 CMOS CoaXPress Area Scan Camera



GEN*i*CAM

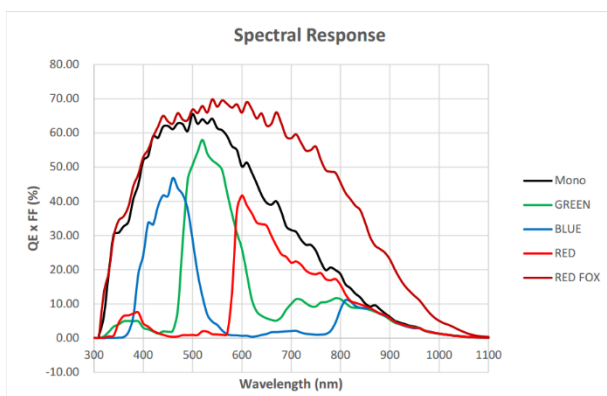
Introduction

MV-CH250-90Y1M/C camera adopts Gpixel GMAX0505 CMOS sensor to provide small pixel size, high resolution and high quality image. It uses 1-link CXP-12 interface to transmit data in real time, and its max. frame rate can reach 41.3 fps in full resolution.

Applicable Industry

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

Sensor Quantum Efficiency



Key Features

- Resolution of 5120 × 5120, pixel size of 2.5 μm × 2.5 μm.
- Supports Binning, reverse image, and ROI settings.
- Adopts CXP-12 interface to transmit data.
- Compatible with C-mount lenses to reduce costs.
- Compatible with CoaXPress Protocol, GenICam Standard.

Available Models

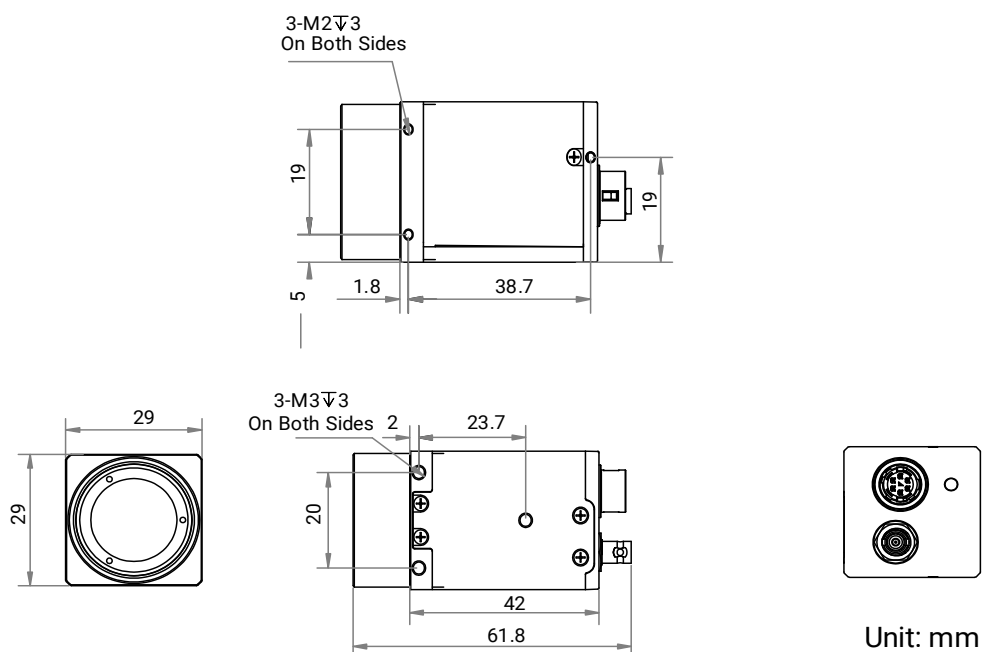
- C-mount without heat sink, mono camera: MV-CH250-90Y1M-NN
- C-mount with heat sink, mono camera: MV-CH250-90Y1M-NH
- C-mount without heat sink, color camera: MV-CH250-90Y1C-NN
- C-mount with heat sink, color camera: MV-CH250-90Y1C-NH

Specification

Model	MV-CH250-90Y1M	MV-CH250-90Y1C
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX0505	
Pixel size	2.5 μm × 2.5 μm	
Sensor size	1.1"	
Resolution	5120 × 5120	
Max. frame rate	41.3 fps @ 5120 × 5120 Mono 8	41.3 fps @ 5120 × 5120 Bayer BG 8
Dynamic range	63 dB	
SNR	36 dB	
Gain	1.0 × to 5.0 ×	
Exposure time	UltraShort exposure mode: 3 μs to 8 μs Standard exposure mode: 9 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/12	Bayer BG 8/10/12
Binning	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Decimation	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	CoaXPress with Micro-BNC interface	
Digital I/O	6-pin P7 connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1(Line 1), bi-directional non-isolated I/O × 1 (Line 2).	
Power supply	9 VDC to 24 VDC, supports PoCXP	
Power consumption	Typ. 3.9 W @ 12 VDC	
Mechanical		
Lens mount	C-mount	
Dimension	C-mount without heat sink: 29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7") C-mount with heat sink: 29 mm × 85 mm × 42 mm (1.1" × 3.3" × 1.7")	
Weight	C-mount without heat sink: Approx. 74.5 g (0.2 lb.) C-mount with heat sink: Approx. 154.5 g (0.3 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	C-mount without heat sink: Working temperature: 0 °C to 40 °C (32 °F to 104 °F) Storage temperature: −30 °C to 80 °C (−22 °F to 176 °F) C-mount with heat sink: Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: −30 °C to 80 °C (−22 °F to 176 °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, KC, RoHS	

Dimension

C-mount without heat sink



C-mount with heat sink

