MV-CH250-90GM/GC/GN

25 MP 1.1" CMOS GigE Area Scan Camera
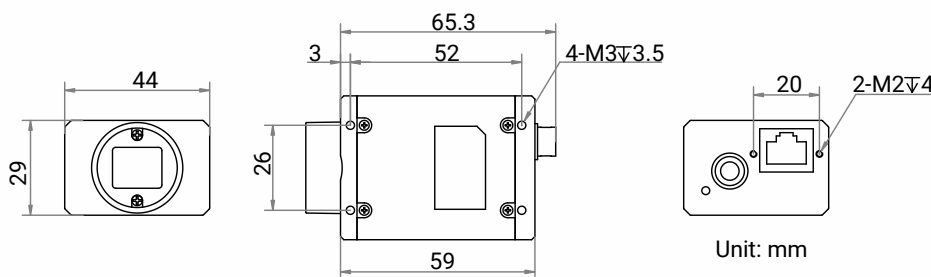
GEN‹i›CAM

GigE VISION®

Introduction

MV-CH250-90GM/GC/GN camera adopts Gpixel GMAX0505 sensor to provide high-quality images. It uses GigE interface to transmit non-compressed images in real time, and its max. frame rate can reach 4.5 fps in full resolution.

Key Feature

- Resolution of 5120 × 5120, pixel size of 2.5 µm × 2.5 µm.
- Supports increasing frame rate via ROI, and supports binning, reverse image output and LSC.
- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Supports hardware trigger, software trigger, free run, etc.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.
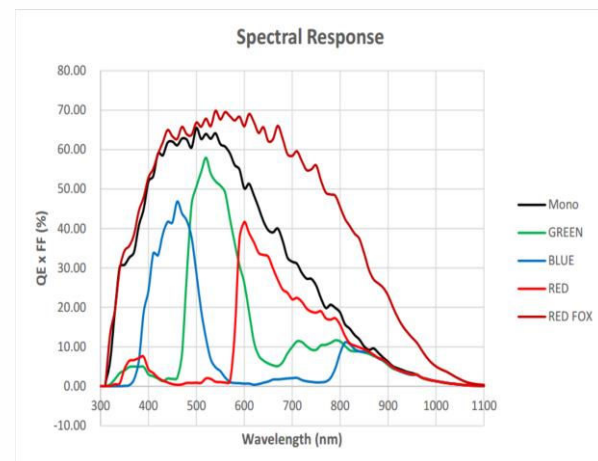
Dimension

Unit: mm

Available Model

- Mono camera: MV-CH250-90GM
- Color camera: MV-CH250-90GC
- NIR camera: MV-CH250-90GN

Applicable Industry

SMT/ PCB AOI, FPD, railway related applications, etc.

Sensor Quantum Efficiency

Specification

Model	MV-CH250-90GM	MV-CH250-90GN	MV-CH250-90GC
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	4.5 fps @5120 × 5120 Mono 8		4.5 fps @5120 × 5120 Bayer BG 8
Dynamic range	63 dB		
SNR	36 dB		
Gain	0 dB to 24 dB		
Exposure time	12 µs to 10 sec		
Exposure mode	Off/Once/Continuous exposure mode		
Mono/color	Mono	NIR	Color
Pixel format	Mono 8/10/10Packed/12/12Packed		Mono 8/10/12, Bayer BG 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Supports 1 × 1, 2 × 2		
Decimation	Supports 1 × 1, 2 × 2, 4 × 4		
Reverse image	Supports horizontal and vertical reverse image output		
Electrical feature			
Data interface	Gigabit Ethernet, compatible with Fast Ethernet		
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 PoE		
Power consumption	Typ. 3.1 W@12 VDC		Typ. 3.2 W@12 VDC
Mechanical			
Lens mount	C-mount		
Dimension	29 mm × 44 mm × 59 mm (1.1" × 1.7" × 2.3")		
Weight	Approx. 100 g (0.2 lb.)		
Ingress protection	IP40 (under proper lens installation and wiring)		
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)		
Humidity	20% to 95% RH, non-condensing		
General			
Client software	MVS or third-party software meeting with GigE Vision Protocol		
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS		
Compatibility	GigE Vision V2.0, GenlCam		
Certification	CE, FCC, RoHS, KC		