

MV-CH250-90VM/VC

25 MP 1.1" CMOS Dual USB 3.0 Area Scan Camera



GEN*i*CAM

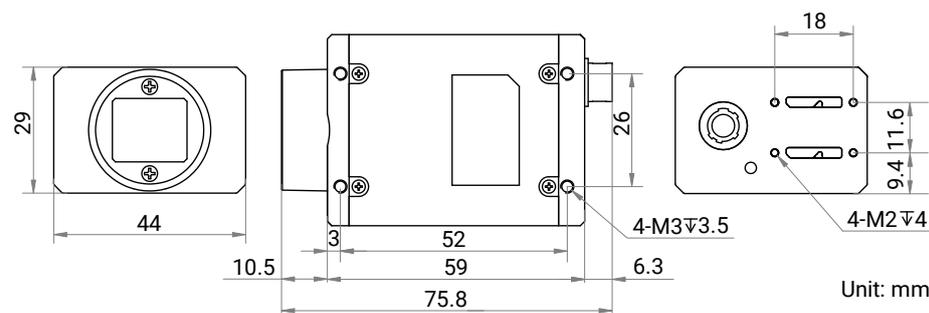
Introduction

MV-CH250-90VM/VC camera adopts Gpixel GMAX0505 CMOS sensor to provide high-quality images. It uses dual USB 3.0 interfaces to transmit images in real time, and its max. frame rate can reach 30 fps in full resolution.

Key Feature

- Supports manual adjustment of gain, LUT, Gamma correction, etc.
- Adopts dual USB 3.0 interfaces to transmit data.
- Supports hardware trigger, software trigger, and free run.
- Supports flexible installation via the installation holes.
- Adopts compact design for small spatial installation.
- Compatible GenICam Standard.

Dimension



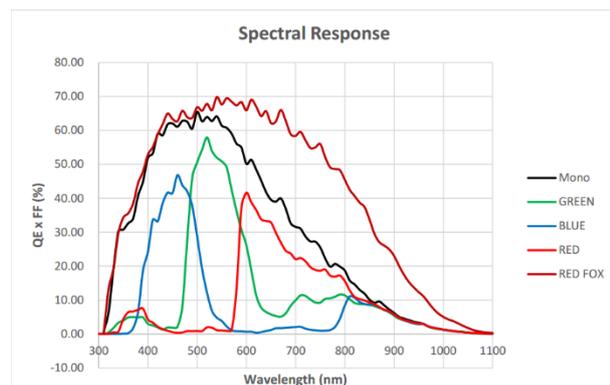
Available Model

- Mono camera: MV-CH250-90VM
- Color camera: MV-CH250-90VC

Applicable Industry

SMT/PCB AOI, FPD detection, photovoltaics, etc.

Sensor Quantum Efficiency



Specification

Model	MV-CH250-90VM	MV-CH250-90VC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX0505	
Pixel size	2.5 μm \times 2.5 μm	
Sensor size	1.1"	
Resolution	5120 \times 5120	
Max. frame rate	30 fps @5120 \times 5120 Mono 8	30 fps @5120 \times 5120 Bayer BG 8
Dynamic range	65 dB	
SNR	40 dB	
Gain	2.0 x to 5.0 x	
Exposure time	UltraShort exposure mode: 1 μs to 8 μs Standard exposure mode: 9 μs to 10 sec	UltraShort exposure mode: 2 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 8/10/10Packed/12/12Packed	Mono 8/10/12 Bayer BG 8/10/10Packed/12/12Packed YUV422Packed, YUYV422_Packed RGB 8, BGR 8
Binning	Supports 1 \times 1, 2 \times 2, 4 \times 4	
Decimation	Supports 1 \times 1, 2 \times 2, 4 \times 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	USB 3.0, compatible with USB 2.0	
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 USB 3.0 power supply	
Power consumption	Typ. 4.8 W @ 5 VDC (dual USB 3.0 interfaces provide power supply)	Typ. 5.5 W @ 5 VDC (dual USB 3.0 interfaces provide power supply)
Mechanical		
Lens mount	C-mount	
Dimension	29 mm \times 44 mm \times 59 mm (1.1" \times 1.7" \times 2.3")	
Weight	Approx. 100 g (0.2 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -10 $^{\circ}\text{C}$ to 40 $^{\circ}\text{C}$ (14 $^{\circ}\text{F}$ to 104 $^{\circ}\text{F}$) 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	
Operating system	32/64-bit Windows XP/7/10/11	
Compatibility	GenICam	
Certification	CE, RoHS, KC	