

# **MV-CU050-90UM/UC**

5 MP 1/2" CMOS USB3.0 Area Scan Camera









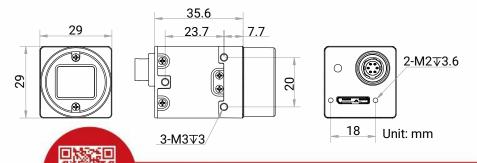
#### Introduction

MV-CU050-90UM/UC camera adopts GMAX2505 sensor to provide high-quality images. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 59.8 fps in full resolution.

#### **Key Feature**

- Adopts brand new design to reduce power consumption.
- Supports auto or manual adjustment of gain, exposure time, and manual adjustment of LUT, Gamma correction, etc.
- Supports customized ROI, horizontal and vertical reverse image output.
- Adopts compact design for flexible installation.
- Compatible with USB3 Vision Protocol, GenlCam Standard, and third-party software based on the protocol and standard.

# Dimension



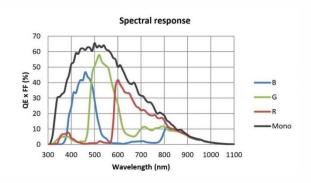
## **Available Model**

- Mono camera: MV-CU050-90UM
- Color camera: MV-CU050-90UC

## **Applicable Industry**

Electronic semiconductor, factory automation, liquor and beverage, medicine packing, etc.

## **Sensor Quantum Efficiency**



## **Specification**

Model	MV-CU050-90UM	MV-CU050-90UC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	GMAX2505	
Pixel size	2.5 μm × 2.5 μm	
Sensor size	1/2"	
Resolution	2600 × 2160	
Max. frame rate	59.8 fps @2600 × 2160 Mono 8	59.8 fps @2600 × 2160 Bayer BG 8
Dynamic range	63.9 dB	
SNR	37 dB	
Gain	0 dB to 12 dB	
Exposure time	3 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Bayer BG 8/10/10Packed/12/12Packed
Binning	Supports 1 × 1, 2 × 2, 4 × 4	
Decimation	Supports 1 × 1, 2 × 2, 4 × 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	USB3.0, compatible with USB2.0	
Digital I/O	6-pin P7 connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-	
	isolated output $\times$ 1 (Line 1), and bi-directional non-isolated I/O $\times$ 1 (Line 2)	
Power supply	9 VDC to 24 VDC, supports USB3.0 power supply	
Power consumption	Typ. 2.1 W@5 VDC	Typ. 2.2 W@5 VDC
	(USB3.0 provides power supply)	(USB3.0 provides power supply)
Mechanical		
Lens mount	C-mount	
Dimension	29 mm × 29 mm × 35.6 mm (1.1" × 1.1" × 1.4")	
Weight	Approx. 94 g (0.2 lb.)	
Ingress protection	IP30 (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 80% RH, non-condensing	
General		
Client software	MVS or third-party software meeting with USB3 Vision Protocol	
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS	
Compatibility	USB3 Vision, GenlCam	
Certification	CE, RoHS, KC	



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