

MV-CU050-90UM/UC

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



GEN*i*CAM

USBTM
VISION

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, GeniCam Standard, and third-party software based on the protocol and standard.

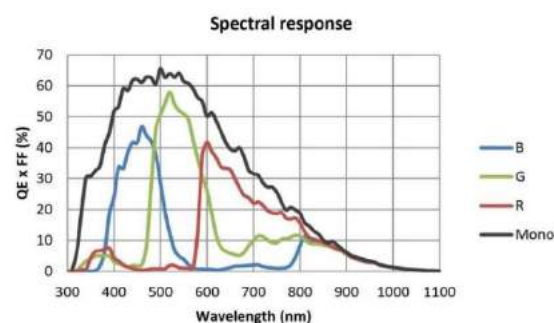
Available Model

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

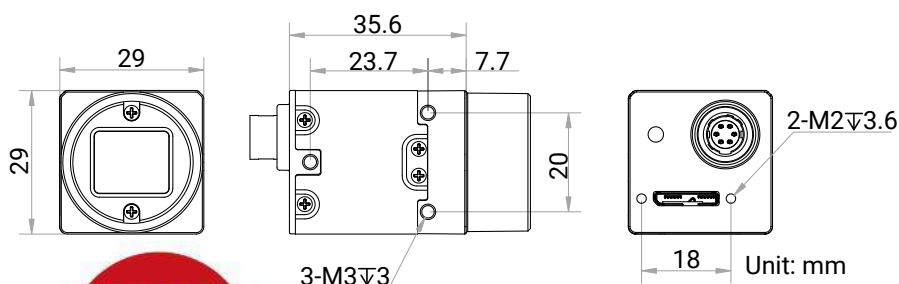
Applicable Industry

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

Sensor Quantum Efficiency



Dimension



Specification

Model	MV-CU050-90UM	MV-CU050-90UC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	GMAX2505	
Pixel size	2.5 μm \times 2.5 μm	
Sensor size	1/2"	
Resolution	2600 \times 2160	
Max. frame rate	59.8 fps @2600 \times 2160 Mono 8	59.8 fps @2600 \times 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 \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	USB3.0, compatible with USB2.0	
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), 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 (USB3.0 provides power supply)	Typ. 2.2 W@5 VDC (USB3.0 provides power supply)
Mechanical		
Lens mount	C-mount	
Dimension	29 mm \times 29 mm \times 35.6 mm (1.1" \times 1.1" \times 1.4")	
Weight	Approx. 94 g (0.2 lb.)	
Ingress protection	IP30 (under proper lens installation and wiring)	
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)	
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, GenICam	
Certification	CE, RoHS, KC	



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