

# MV-CS050-60UM/UC

5 MP 2/3" CMOS USB3.0 Area Scan Camera



GEN*i*CAM

USB<sup>TM</sup>  
VISION

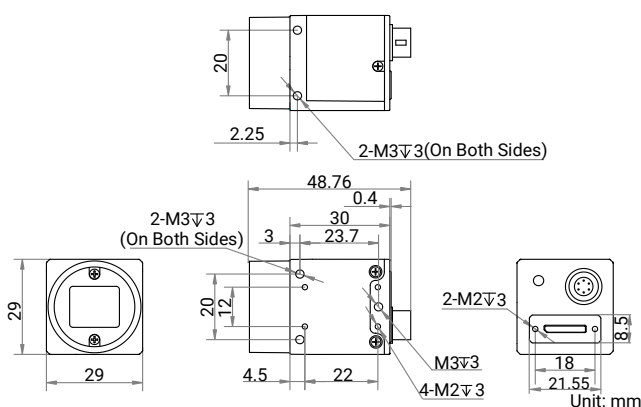
## Introduction

MV-CS050-60UM/UC camera adopts CMOS global sensor to provide high-quality images. It uses USB3.0 interface to transmit images in real time, and its max. frame rate can reach 60 fps in full resolution.

## Key Feature

- Adopts brand new structure design and supports installation from four sides.
- Supports Super Palette and Super Bayer to provide high-quality images.
- Supports auto or manual adjustment of gain, exposure time, white balance, LUT, Gamma correction, etc., and supports Sequencer.
- Supports hard trigger, software trigger, free run, etc.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

## Dimension



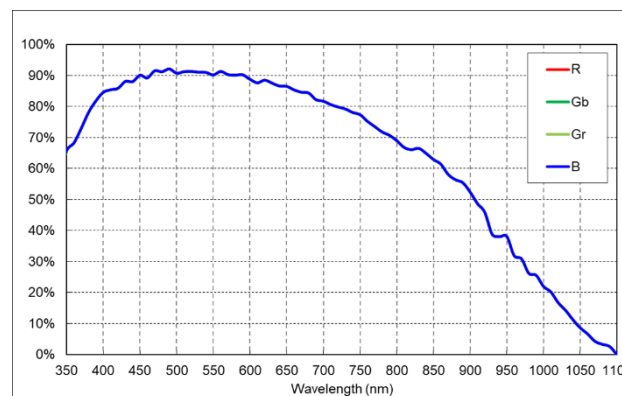
## Available Model

- Mono camera: MV-CS050-60UM
- Color camera: MV-CS050-60UC

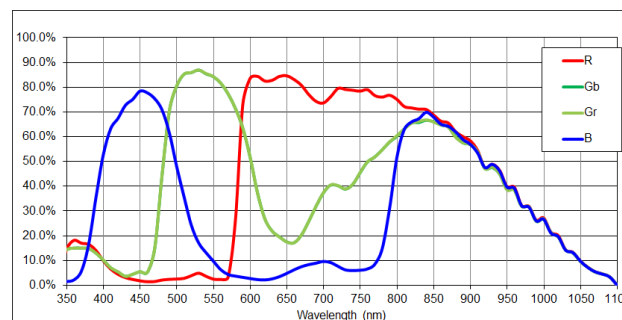
## Applicable Industry

Electronics and semiconductor, factory automation, medicine package, etc.

## Sensor Quantum Efficiency



MV-CS050-60UM



MV-CS050-60UC

## Specification

Model	MV-CS050-60UM	MV-CS050-60UC
<b>Performance</b>		
Sensor type	CMOS, global shutter	
Pixel size	3.45 $\mu\text{m}$ $\times$ 3.45 $\mu\text{m}$	
Sensor size	2/3"	
Resolution	2448 $\times$ 2048	
Max. frame rate	60 fps @2448 $\times$ 2048 Mono 8	60 fps @2448 $\times$ 2048 Bayer GR 8
Dynamic range	73.9 dB	
SNR	42.4 dB	
Gain	0 dB to 24 dB	
Exposure time	5 $\mu\text{s}$ 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 GR 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_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	
<b>Electrical features</b>		
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), 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. 1.7 W@5 VDC (USB3.0 provides power supply)	Typ. 1.8 W@5 VDC (USB3.0 provides power supply)
<b>Mechanical</b>		
Lens mount	C-mount	
Dimension	29 mm $\times$ 29 mm $\times$ 30 mm (1.1" $\times$ 1.1" $\times$ 1.2")	
Weight	Approx. 80 g (0.2 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -30 $^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$ ) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$ )	
Humidity	20% to 95% RH, non-condensing	
<b>General</b>		
Client software	MVS or third-party software meeting with USB3 Vision Protocol	
Operating system	32/64-bit Windows XP/7/10, 64-bit Windows 11, 32/64-bit Linux and 64-bit MacOS	
Compatibility	USB3 Vision, GenICam	
Certification	CE, RoHS, KC	