

# MV-CS050-80UM/UC

5 MP CMOS USB 3.0 Area Scan Camera



GEN*i*CAM

USB<sup>TM</sup>  
VISION

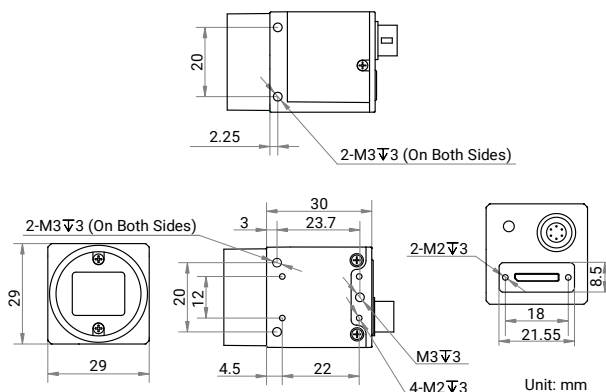
## Introduction

MV-CS050-80UM/UC camera adopts CMOS global sensor to provide high-quality images. It uses USB 3.0 interface to transmit images in real time, and its max. frame rate can reach 80 fps in full resolution

## Key Features

- 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



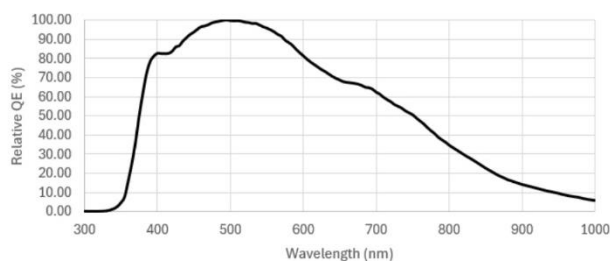
## Available Models

- Mono camera: MV-CS050-80UM
- Color camera: MV-CS050-80UC

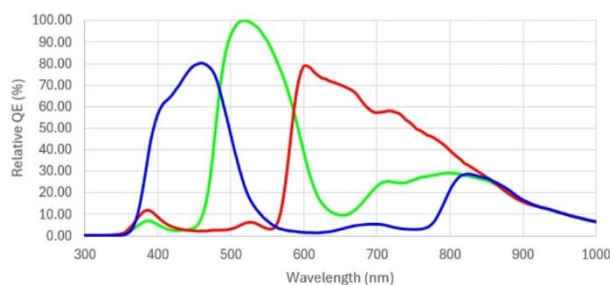
## Applicable Industry

Electronic semiconductor, factory automation, food and beverage, medicine packaging, etc.

## Sensor Quantum Efficiency



MV-CS050-80UM



MV-CS050-80UC

## Specification

Model	MV-CS050-80UM	MV-CS050-80UC
<b>Performance</b>		
Sensor type	CMOS, global shutter	
Sensor model	SS	
Pixel size	3.45 $\mu\text{m}$ $\times$ 3.45 $\mu\text{m}$	
Sensor size	2/3"	
Resolution	2448 $\times$ 2048	
Max. frame rate	80 fps @ 2448 $\times$ 2048 Mono 8	80 fps @ 2448 $\times$ 2048 Bayer BG 8
Dynamic range	60.9 dB	61.8 dB
SNR	41.7 dB	41.8 dB
Gain	0 dB to 12 dB	
Exposure time	15 $\mu\text{s}$ to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8 Bayer BG 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	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. 1.6 W @ 5 VDC (USB 3.0 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. 87 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 $80$ $^{\circ}\text{C}$ ( $-22$ $^{\circ}\text{F}$ to $176$ $^{\circ}\text{F}$ )	
Humidity	20% RH to 95% RH (no condensation)	
<b>General</b>		
Client software	MVS or third-party software meeting with USB3 Vision Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, and 32/64-bit Linux	
Compatibility	USB3 Vision, GenICam	
Certification	CE, RoHS, KC	