

# MV-CH100-60UM/UC

10 MP 1" CMOS USB3.0 Area Scan Camera



**GEN<I>CAM**

**USB<sup>TM</sup>**  
VISION

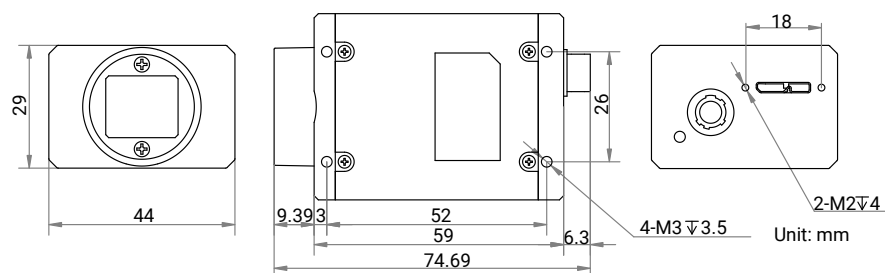
## Introduction

MV-CH100-60UM/UC camera adopts CMOS global 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 36 fps in full resolution.

## Key Feature

- Supports auto or manual adjustment of gain, exposure time, white balance, LUT, Gamma correction, etc.
- Supports customized ROI, horizontal and vertical reverse image output.
- Supports hardware trigger, software trigger, free run, etc.
- Compatible with USB3 Vision Protocol, GenCam Standard, and the third-party software based on these protocol and standard.

## Dimension



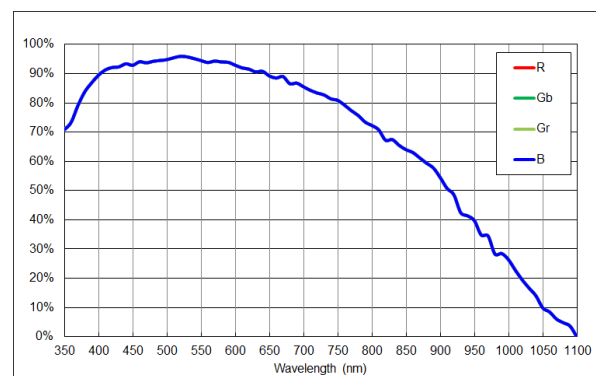
## Available Model

- Mono camera: MV-CH100-60UM
- Color camera: MV-CH100-60UC

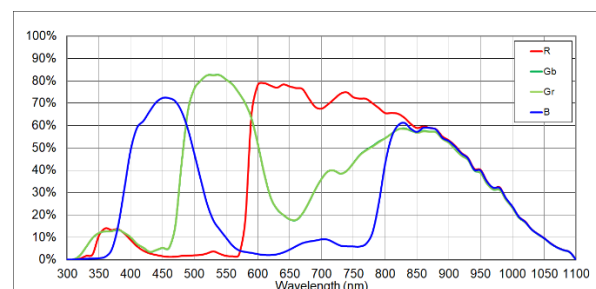
## Applicable Industry

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

## Sensor Quantum Efficiency



MV-CH100-60UM



MV-CH100-60UC

## Specification

Model	MV-CH100-60UM	MV-CH100-60UC
<b>Performance</b>		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	1"	
Resolution	4096 × 2460	
Max. frame rate	36 fps @4096 × 2460 Mono 8	36 fps @4096 × 2460 Bayer GR 8
Dynamic range	58.2 dB	
SNR	43 dB	
Gain	0 dB to 24 dB	
Exposure time	80 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 GR 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
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	
<b>Electrical feature</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 × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2).	
Power supply	9 VDC to 24 VDC, supports USB3.0 power supply	
Power consumption	Typ. 3.6 W@5 VDC (USB3.0 provides power supply)	Typ. 4.0 W@5 VDC (USB3.0 provides power supply)
<b>Mechanical</b>		
Lens mount	C-mount	
Dimension	29 mm × 44 mm × 59 mm (1.1" × 1.7" × 2.3")	
Weight	Approx. 113 g (0.2 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -10 °C to 50 °C (14 °F to 122 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °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	