

MV-CH100-60UM/UC

10 MP 1" CMOS USB3.0 Area Scan Camera



GEN<I>CAM

**USBTM
VISION**

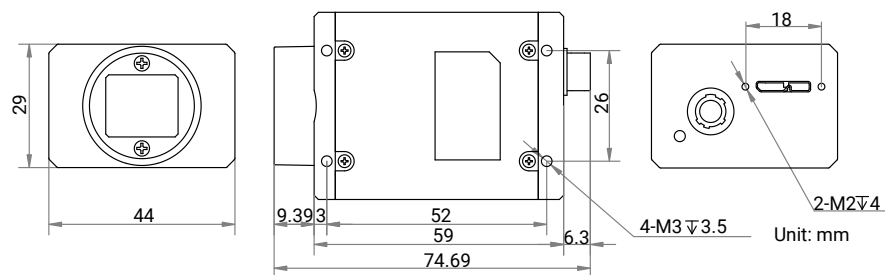
Introduction

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



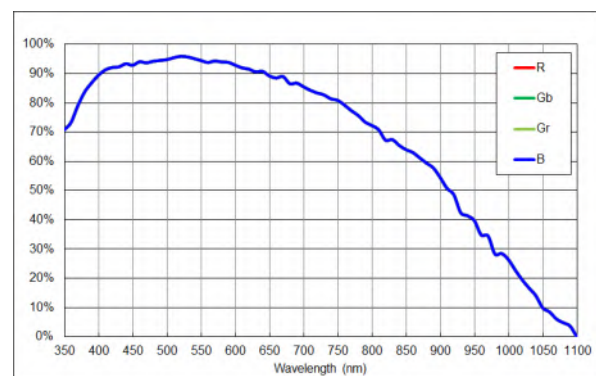
Available Model

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

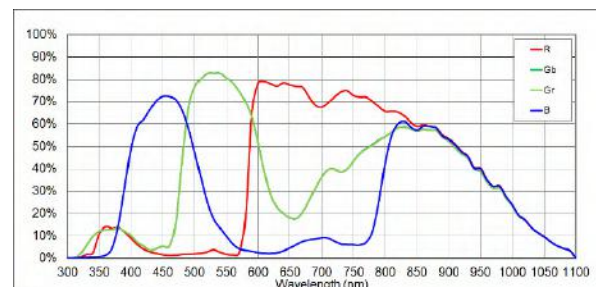
Applicable Industry

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
Performance		
Sensor type	CMOS, global shutter	
Sensor model	HK	
Pixel size	3.45 μm \times 3.45 μm	
Sensor size	1"	
Resolution	4096 \times 2460	
Max. frame rate	36 fps @4096 \times 2460 Mono 8	36 fps @4096 \times 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 \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 feature		
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. 3.6 W@5 VDC (USB3.0 provides power supply)	Typ. 4.0 W@5 VDC (USB3.0 provides power supply)
Mechanical		
Lens mount	C-mount	
Dimension	29 mm \times 44 mm \times 59 mm (1.1" \times 1.7" \times 2.3")	
Weight	Approx. 113 g (0.2 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -10 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (14 $^{\circ}\text{F}$ 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 95% 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, 64-bit Windows 11, 32/64-bit Linux and 64-bit MacOS	
Compatibility	USB3 Vision, GenICam	
Certification	CE, RoHS, KC	