MV-CH120-60UM/UC

12 MP 1.1" CMOS USB 3.0 Area Scan Camera

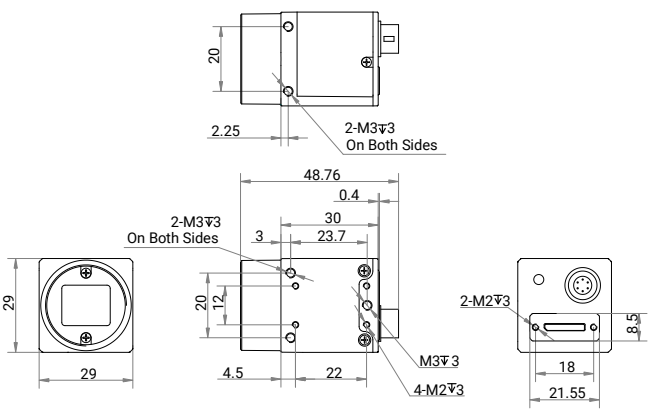
Introduction

MV-CH120-60UM/UC camera adopts CMOS sensor to provide high-quality images. It uses USB 3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 30.7 fps in full resolution.

Key Feature

- Adopts new hardware platform to optimize logical resource and reduce power consumption.
- Supports auto or manual adjustment of gain, exposure time, white balance, LUT, Gamma correction, etc.
- Supports CCM, Sequencer, Super Bayer, Super Palette, etc.
- Adopts brand new structure design and supports installation from four sides.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on these protocol and standard.

Dimension



Unit: mm

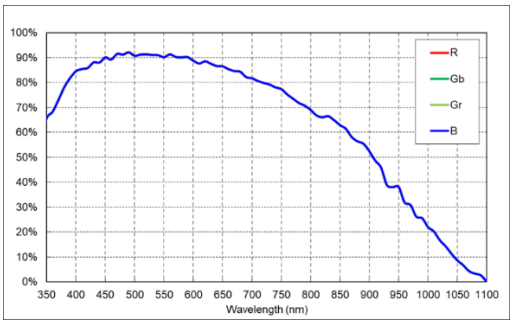
Applicable Industry

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

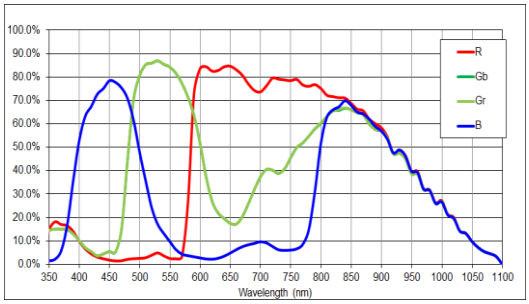
Available Model

- Mono camera: MV-CH120-60UM
- Color camera: MV-CH120-60UC

Sensor Quantum Efficiency



MV-CH120-60UM



MV-CH120-60UC

Specification

Model	MV-CH120-60UM	MV-CH120-60UC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	1.1"	
Resolution	4096 × 3000	
Max. frame rate	30.7 fps @ 4096 × 3000 Mono 8	30.7 fps @ 4096 × 3000 Bayer GB 8
Dynamic range	67.5 dB	
SNR	44.2 dB	
Gain	0 dB to 12 dB	
Exposure time	45 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 GB 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	
Electrical feature		
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 × 1 (Line 0), opto-isolated output × 1 (Line 1), and bi-directional non-isolated I/O × 1 (Line 2).	
Power supply	9 VDC to 24 VDC, supports USB 3.0 power supply	
Power consumption	Typ. 2.2 W @ 5 VDC (USB 3.0 provides power supply)	Typ. 2.4 W @ 5 VDC (USB 3.0 provides power supply)
Mechanical		
Lens mount	C-mount	
Dimension	29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2")	
Weight	Approx. 80 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 80 °C (–22 °F to 176 °F)	
Humidity	20% RH to 95% RH (no condensation)	
General		
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	

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