

MV-CS020-61UM/UC V5

2 MP 1/1.7" CMOS USB 3.0 Area Scan Camera



GEN*<i>i>*CAM

USBTM
VISION

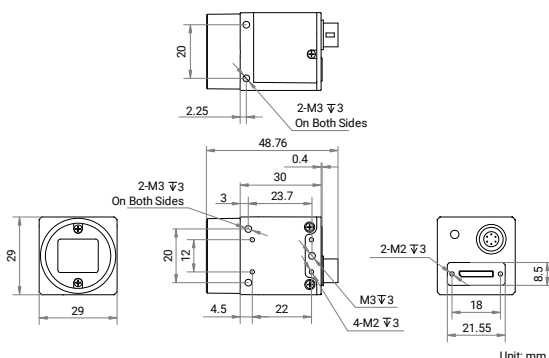
Introduction

MV-CS020-61UM/UC V5 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 99.6 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 hardware trigger, software trigger, anyway mode, etc.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

Dimension



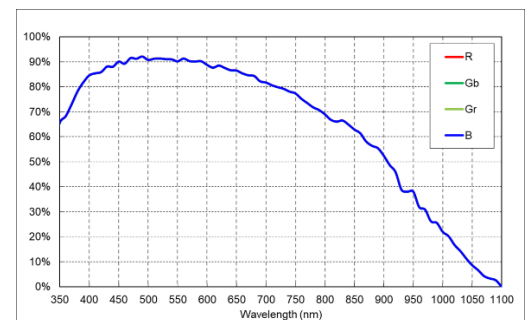
Available Model

- Mono camera: MV-CS020-61UM V5
- Color camera: MV-CS020-61UC V5

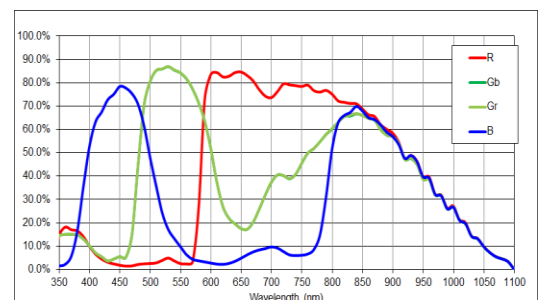
Applicable Industry

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

Sensor Quantum Efficiency



MV-CS020-61UM V5



MV-CS020-61UC V5

Specification

Model	MV-CS020-61UM V5	MV-CS020-61UC V5
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	4.5 μm × 4.5 μm	
Sensor size	1/1.7"	
Resolution	1624 × 1240	
Max. frame rate	99.6 fps @ 1624 × 1240 Mono 8	99.6 fps @ 1624 × 1240 Bayer GR 8
Dynamic range	76.1 dB	75.4 dB
SNR	44.8 dB	44.6 dB
Gain	High full well capacity: 0 dB to 12.8 dB High sensitivity: 0 dB to 24 dB	
Exposure time	High full well capacity: 30 μs to 10 sec High sensitivity: 5 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, 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	
Electrical features		
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), 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. 1.5 W @ 5 VDC (USB 3.0 provides power supply)	Typ. 1.6 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: −30 °C to 60 °C (−22 °F to 140 °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 7/10/11, and 32/64-bit Linux	
Compatibility	USB3 Vision, GenICam	
Certification	CE, RoHS, KC	