MV-CH250-61UM/UC

25 MP USB3.0 Area Scan Camera



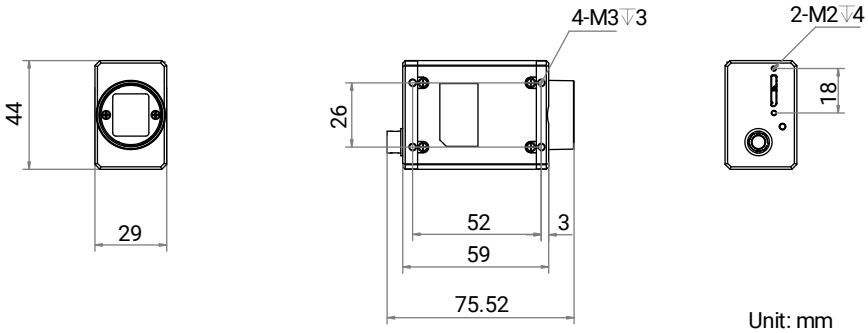
Introduction

MV-CH250-61UM/UC camera adopts stacked BSI 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 14.5 fps in full resolution.

Key Features

- Supports manual adjustment of gain, Gamma, and LUT correction, etc.
- Supports software trigger, hardware trigger, and anyway mode.
- Easy and flexible installation, with mounting holes on both panels of the camera.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

Dimension



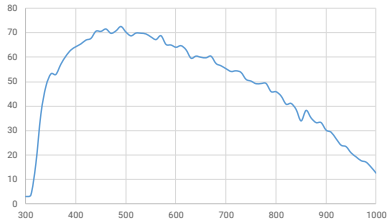
Available Model

- Mono camera: MV-CH250-61UM
- Color camera: MV-CH250-61UC

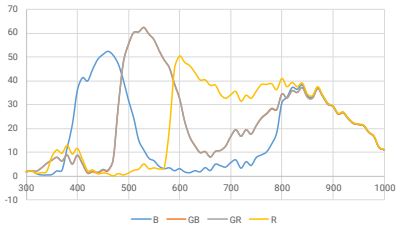
Applicable Industry

SMT/ PCB AOI, FPD, PV industry, etc.

Sensor Quantum Efficiency



MV-CH250-61UM



MV-CH250-61UC

Specification

Model	MV-CH250-61UM	MV-CH250-61UC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	2.5 μm × 2.5 μm	
Sensor size	1.1"	
Resolution	5120 × 5120	
Max. frame rate	14.5 fps @ 5120 × 5120 Mono 8	14.5 fps @ 5120 × 5120 Bayer BG 8
Dynamic range	62 dB	
SNR	38.5 dB	
Gain	0 dB to 24 dB	
Exposure time	51 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode, support TriggerWidth.	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8/10/12, Bayer BG 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	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 USB power supply	9 VDC to 24 VDC
Power consumption	Typ. 3.2 W @ 5 VDC (USB3.0 provides power supply)	Typ. 5 W @ 24 VDC
Mechanical		
Lens mount	C-mount	
Dimension	29 mm × 44 mm × 59 mm (1.1" × 1.7" × 2.3")	
Weight	Approx. 103.8 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 USB3.0 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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