

MV-CH050-10UM/UC

5 MP 2/3" CMOS USB3.0 Area Scan Camera









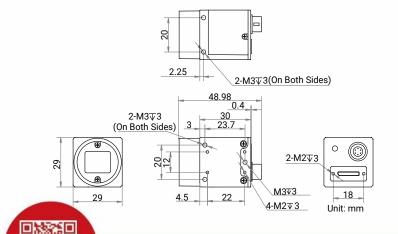
Introduction

MV-CH050-10UM/UC camera adopts Sony® IMX250 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 74.1 fps in full resolution.

Key Feature

- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Supports LSC, Sequencer, Super Palette, etc.
- Supports customized ROI, horizontal and vertical reverse image output.
- Compatible with USB3 Vision Protocol, GenlCam Standard, and the third-party software based on these protocol and standard.

Dimension



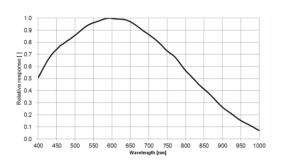
Available Model

- Mono camera: MV-CH050-10UM
- Color camera: MV-CH050-10UC

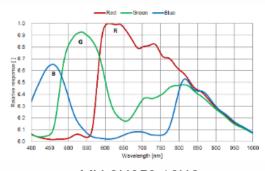
Applicable Industry

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

Sensor Quantum Efficiency



MV-CH050-10UM



MV-CH050-10UC

Specification

Model	MV-CH050-10UM	MV-CH050-10UC	
Performance	III	III	
Sensor type CMOS, global shutter			
Sensor model	Sony® IMX250		
Pixel size	3.45 µm × 3.45 µm		
Sensor size	2/3"		
Resolution	2448 × 2048		
Max. frame rate	74.1 fps @2448 × 2048 Mono 8	74.1 fps @2448 × 2048 Bayer RG 8	
Dynamic range	71 dB		
SNR	40 dB		
Gain	0 dB to 24 dB		
Exposure time	UltraShort exposure mode: 1 µs to 14 µs		
	Standard exposure mode: 15 µs to 10 sec		
Exposure mode	Off/Once/Continuous exposure mode		
Mono/color	Mono	Color	
Pixel format		Mono 8/10/12,	
		Bayer RG 8/10//10Packed/12/12Packed,	
	Mono 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		
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 \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. 3.3 W@5 VDC	Typ. 2.8 W@5 VDC	
	(USB3.0 provides power supply)	(USB3.0 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 70 °C (-22 °F to 158 °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, 32/64-bit Linux and 64-bit MacOS		
Compatibility	USB3 Vision, GenICam		
Certification	CE, RoHS, KC		



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