

MV-CH050-10UM/UC

5MP2/3"CMOSUSB3.0AreaScanCamera



GEN*i*CAM

US3TM
VISION

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

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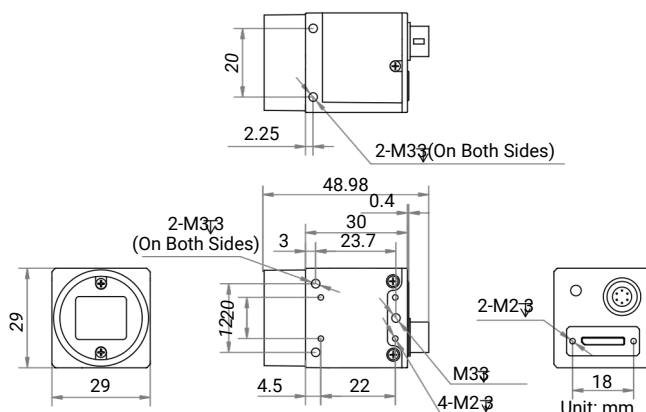
Compact design with mounting holes on panels for flexible mounting from 4 sides. Supports LSC, Sequencer, Super Palette, etc. Supports customized ROI, horizontal and vertical reverse image output. Compatible with USB3 Vision Protocol, GeniCam Standard, and the third-party software based on these protocol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

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Dimension



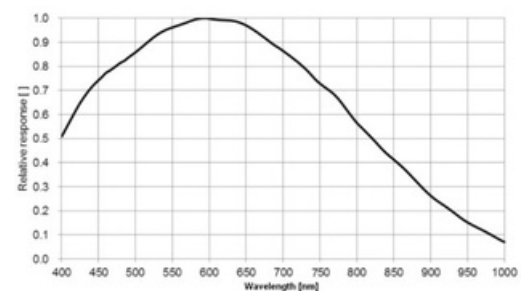
Available Model

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

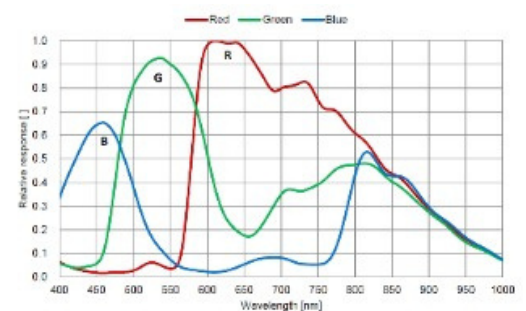
Applicable Industry

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		
Sensor type	CMOS, global shutter Sony® IMX250 3.45	
Sensor model	μm × 3.45 μm 2/3" 2448 × 2048 74.1 fps	
Pixel size	@ 2448 × 2048 Mono 8 71 dB 40 dB 0 dB	
Sensor size	to 24 dB UltraShort exposure mode: 1 μs	
Resolution Max.	to 14 μs Standard exposure mode: 15 μs	
frame rate	to 10 sec Off/Once/Continuous exposure	74.1 fps @ 2448 × 2048 Bayer RG 8
Dynamic range	mode Mono	
SNR Gain		
Exposure time		
Exposure mode		
Mono/color		Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8/10/12, Bayer RG 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 × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2).	
Power supply	9 VDC to 24 VDC, supports USB3.0 power supply	
Power consumption	Typ. 3.3 W @ 5 VDC (USB3.0 provides power supply)	Typ. 2.8 W @ 5 VDC (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% 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, 32/64-bit Linux	
Compatibility	USB3 Vision, GenICam	
Certification	CE, RoHS, KC	