

MV-CA050-12UM/UC

5.0MP2/3"CMOSUSB3.0AreaScanCamera



GEN*i*CAM

US3TM
VISION

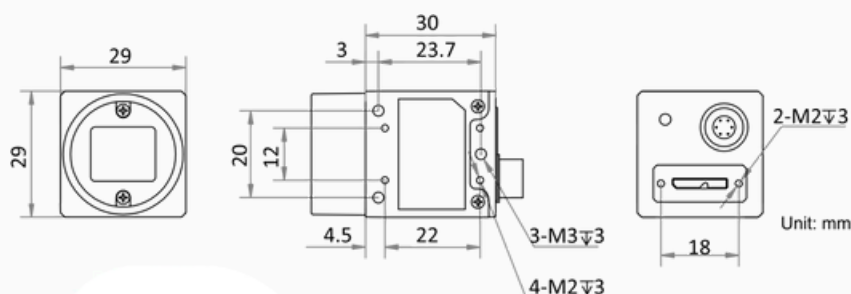
Introduction

MV-CA050-12UM/UC camera adopts Sony® IMX264 sensor to provide high-quality image. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 47 fps (mono camera) or 60 fps (color camera) in full resolution.

Key Feature

- Supports auto and manual adjustment for gain, exposure control, white balance, etc.
- Supports hardware trigger, software trigger, free run, etc.
- Adopts M2 screw holes for securing cable that connects USB3.0 interface.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on these protocol and standard.

Dimension



Available Model

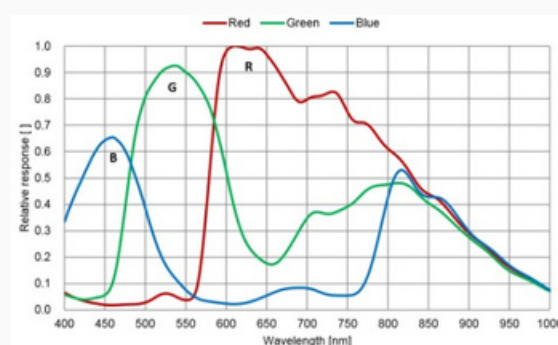
□ Mono camera: MV-CA050-12UM

□ Color camera: MV-CA050-12UC

Applicable Industries

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

Sensor Quantum Efficiency



Specification

Model	Camera	MV-CA050-12UM	MV-CA050-12UC
Sensor	type		
Sensor	model	CMOS, global shutter	
Pixel	size	Sony® IMX264	
Sensor	size	3.45 μm × 3.45 μm	
Resolution	Max.	2/3"	
frame	rate	2448 × 2048	
Dynamic	range	47 fps @2448 × 2048	60 fps @2448 × 2048
SNR	Gain	72 dB	
Exposure time		40.2 dB	
		0 dB to 24 dB	0 dB to 20 dB
		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 8/10/10p/12/12p	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, 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), and bi-directional non-isolated I/O × 1 (Line 2)	
Power supply		9 VDC to 24 VDC, supports USB3.0 power supply	
Power consumption		Typ. 2.9 W @5 VDC (USB3.0 provides power supply)	Typ. 3.3 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 (0.18 lb.)	
Ingress protection		IP30 (under correct lens installation and wiring)	
Temperature		Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)	
Humidity		20% to 80% 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	
Certifications		CE, RoHS, KC	

HIKROBOT

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