

MV-CH120-10UM/UC V4

12 MP 1.1" CMOS USB 3.0 Area Scan Camera



GEN*i*CAM

US3TM
VISION

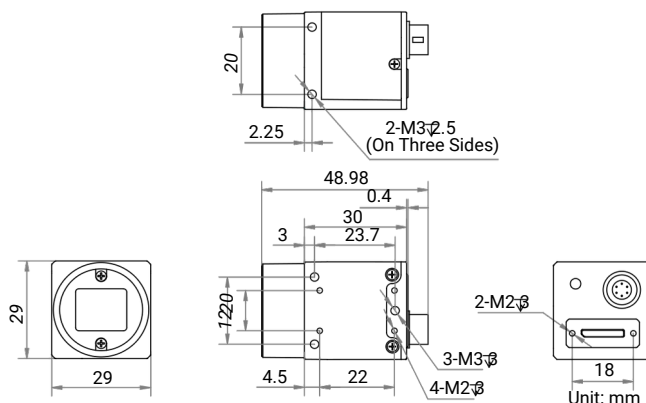
Introduction

MV-CH120-10UM/UC V4 camera adopts Sony IMX304 sensor to provide high-quality images. It uses USB 3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 30.5 fps in full resolution.

Key Feature

- Supports LSC, Sequencer, passive transmission, Super Bayer, Super Palette, etc. Compact design with mounting holes on panels for flexible mounting from 4 sides. Supports hardware trigger, software trigger, free run, etc. Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on these protocol and standard.

Dimension



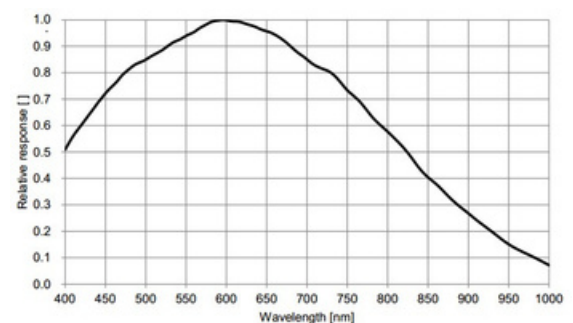
Available Model

- Mono camera: MV-CH120-10UM V4
- Color camera: MV-CH120-10UC V4

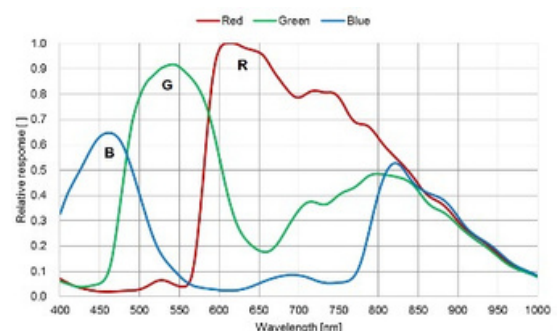
Applicable Industry

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

Sensor Quantum Efficiency



MV-CH120-10UM V4



MV-CH120-10UC V4



Specification

HIKROBOT

Model	MV-CH120-10UM V4	MV-CH120-10UC V4
Performance		
Sensor type	CMOS, global shutter Sony® IMX304 3.45	
Sensor model	μm × 3.45 μm 1.1" 4096 × 3000 30.5 fps @	
Pixel size	4096 × 3000 Mono 8 72.2 dB 40.2 dB 0 dB	
Sensor size	to 24 dB UltraShort exposure mode: 2 μs	
Resolution Max.	to 14 μs Standard exposure mode: 15 μs	
frame rate	to 10 sec Off/Once/Continuous exposure	30.5 fps @ 4096 × 3000 Bayer RG 8
Dynamic range	mode Mono	
SNR Gain		
Exposure time		
Exposure mode		
Mono/color		Color Mono 8/10/12 Bayer RG
Pixel format	Mono 8/10/10Packed/12/12Packed	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	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), and bi-directional non-isolated I/O × 1 (Line 2).	
Power supply	9 VDC to 24 VDC, supports USB power supply	
Power consumption	Typ. 2.9 W @ 5 VDC (USB 3.0 provides power supply)	Typ. 3.2 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: −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, and 32/64-bit Linux	
Compatibility	USB3 Vision, GenICam	
Certification	CE, RoHS, KC	