

MV-CB120-10UM/UC V4

12MP1/1.7"CMOSUSB3.0BoardLevelCamera



GEN*i*CAM

USBTM
VISION

Introduction

MV-CB120-10UM/UC V4 camera adopts Sony® IMX226 sensor to provide high-quality image and transmit images in real time, and max. frame rate can reach 30 fps. With single board design, it is small in size, which can meet different spatial requirements.

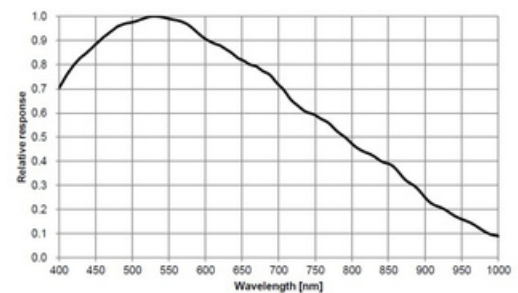
Key Feature

- Supports auto and manual adjustment for gain, exposure control, white balance,
- Gamma, LUT, etc. Adopts image interpolation algorithm for color camera to have better
- color correction. Power supply and data transmission via USB3.0 interface.
- Compatible with USB3 Vision Protocol, GenICam standard, and the third-party software based on these protocol and standard.

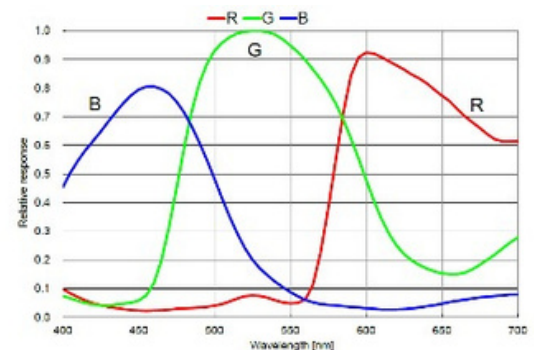
Available Model

Single board mono camera: MV-CB120-10UM-B V4
 Single board color camera: MV-CB120-10UC-B V4
 C-mount mono camera: MV-CB120-10UM-C V4
 C-mount color camera: MV-CB120-10UC-C V4
 M12-mount mono camera: MV-CB120-10UM-S V4
 M12-mount color camera: MV-CB120-10UC-S V4

Sensor Quantum Efficiency



MV-CB120-10UM V4



MV-CB120-10UC V4

Applicable Industry

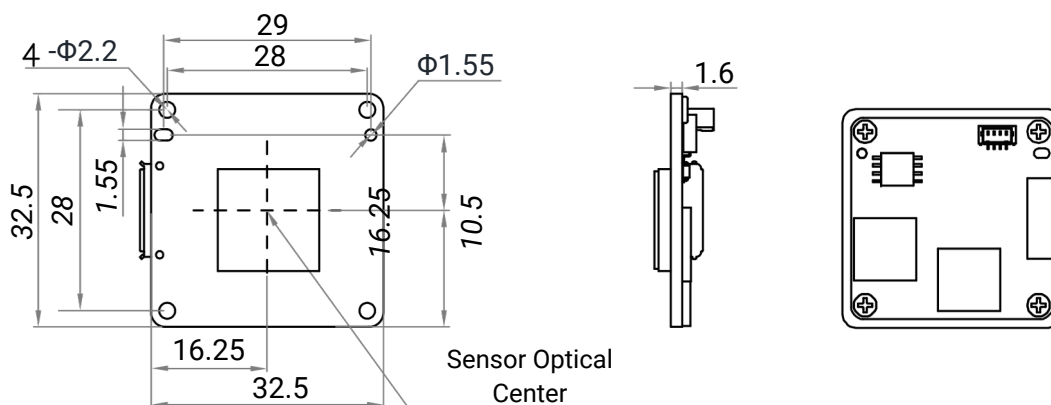
Electronic semiconductor, factory automation, logistics, liquor and beverage, medicine packing, etc.

Specification

Model	Camera	MV-CB120-10UM V4	MV-CB120-10UC V4
Sensor	type		
Sensor	model	CMOS, rolling shutter	
Pixel	size	Sony® IMX226	
Sensor	size	1.85 μm × 1.85 μm	
Resolution	Max.	1/1.7"	
frame	rate	4032 × 3036	
Dynamic	range	30 fps @ 4032 × 3036 Mono 8	30 fps @ 4032 × 3036 Bayer RG 8
SNR	Gain	64.6 dB	
Exposure	time	39.9 dB	
Exposure	mode	0 dB to 20 dB	
Mono/color		33 μs to 2 sec	
		Supports Off/Once/Continuous exposure mode, and Global Reset.	
		Mono	Color
Pixel format		Mono 8/10/10Packed/12/12Packed	Mono8/10/12 Bayer RG 8/10/10Packed/12/12Packed YUV422Packed, YUV422_YUYV_Packed RGB8, BGR8
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	
Digital I/O		Bi-directional non-isolated I/O × 2 (Line 2, Line 5)	
Power supply		USB 3.0 power supply	
Power consumption		Typ. 1.5 W @ 5 VDC (USB power supply)	Typ. 2 W @ 5 VDC (USB power supply)
Mechanical			
Lens mount		Single board camera: none C-mount camera: C-mount M12-mount camera: M12-mount	
Dimension		Single board camera: 32.5 mm × 32.5 mm × 1.6 mm (1.3" × 1.3" × 0.1") C-mount camera: 35 mm × 35 mm × 8.6 mm (1.4" × 1.4" × 0.3") M12-mount camera: 35 mm × 35 mm × 8.6 mm (1.4" × 1.4" × 0.3")	
Weight		Single board camera: Approx. 10 g (0.02 lb.) C-mount camera: Approx. 30 g (0.07 lb.) M12-mount camera: Approx. 30 g (0.07 lb.)	
Temperature		Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: −30 °C to 80 °C (−22 °F to 176 °F)	
Humidity		20% RH to 80% RH (no condensation)	
General			
Client software		MVS or third-party software 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	

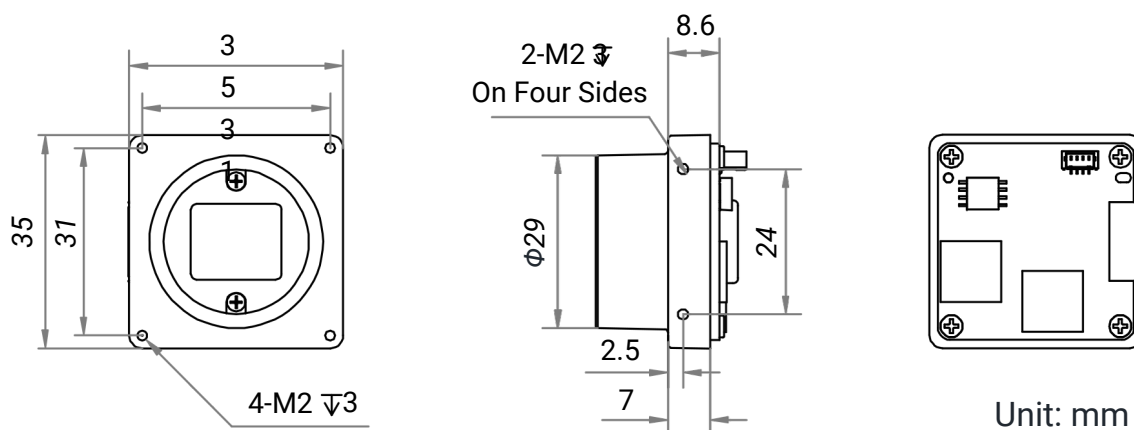
Dimension

Singleboardcamera:



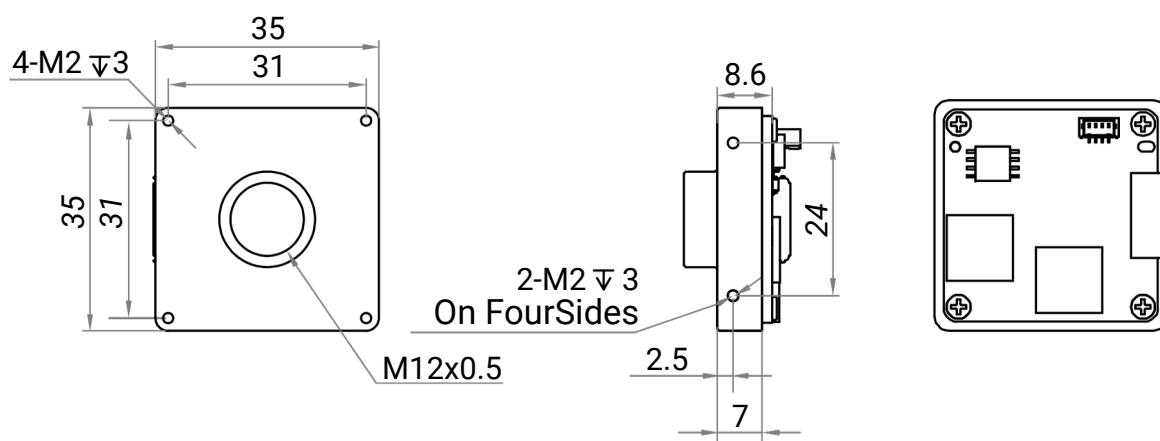
Unit: mm

C-mount camera:



Unit: mm

M12-mount camera:



Unit: mm