

MV-CB120-10UC V4

12 MP 1/1.7" CMOS USB3.0 Board Level Camera



GEN*i*CAM

USBTM
VISION

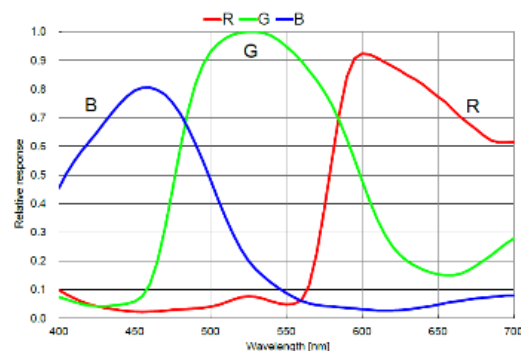
Introduction

MV-CB120-10UC 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.

Sensor Quantum Efficiency



Applicable Industry

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

Available Model

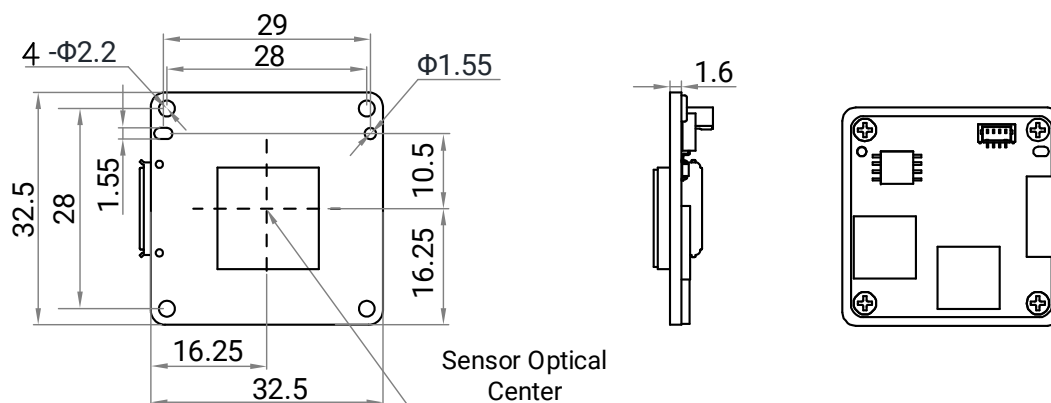
- Single board color camera: MV-CB120-10UC-B V4
- C-mount color camera: MV-CB120-10UC-C V4
- M12-mount color camera: MV-CB120-10UC-S V4

Specification

Model	MV-CB120-10UC V4
Camera	
Sensor type	CMOS, rolling shutter
Sensor model	Sony® IMX226
Pixel size	1.85 μm × 1.85 μm
Sensor size	1/1.7"
Resolution	4032 × 3036
Max. frame rate	30 fps @ 4032 × 3036 Bayer RG 8
Dynamic range	64.6 dB
SNR	39.9 dB
Gain	0 dB to 20 dB
Exposure time	33 μs to 2 sec
Exposure mode	Supports Off/Once/Continuous exposure mode, and Global Reset.
Mono/color	Color
Pixel format	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. 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 7/10/11, 32/64-bit Linux
Compatibility	USB3 Vision, GenICam
Certification	CE, RoHS, KC

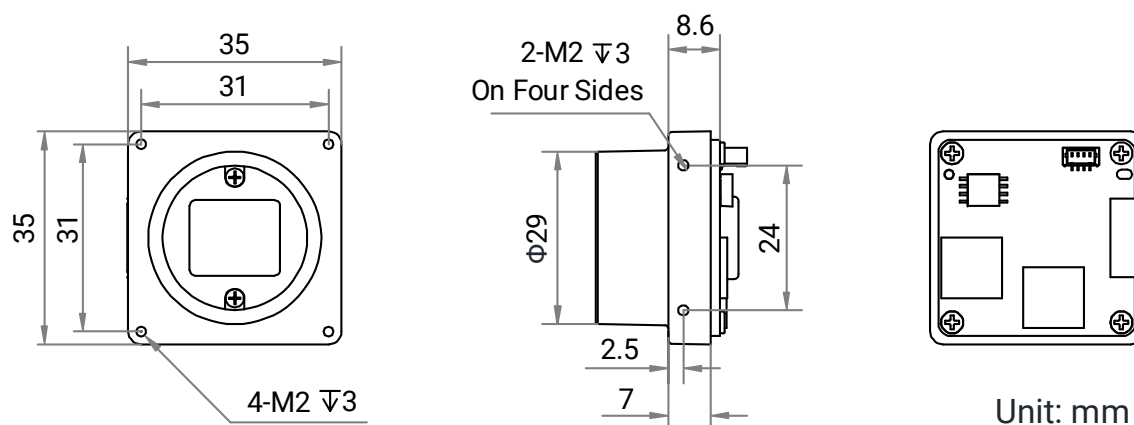
Dimension

Single board camera:



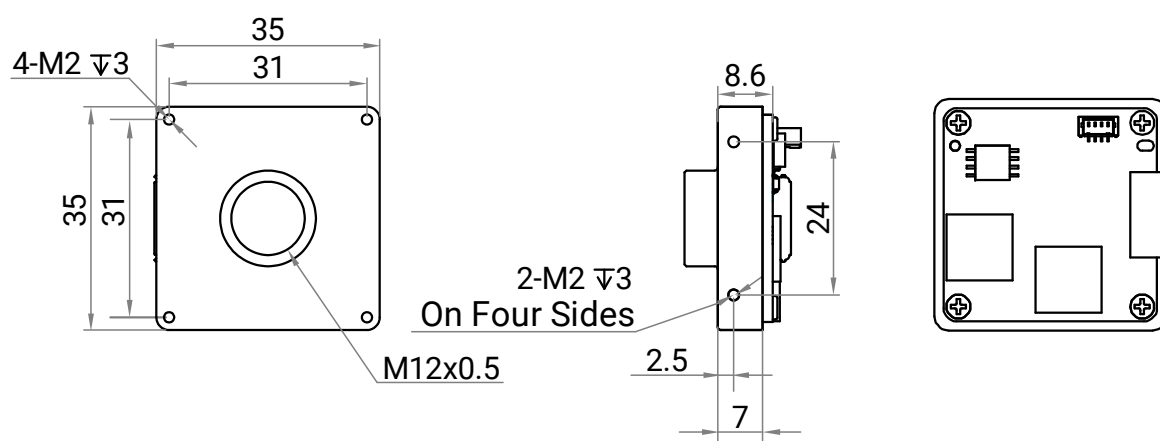
Unit: mm

C-mount camera:



Unit: mm

M12-mount camera:



Unit: mm