# MV-CB120-10UM/UC-S

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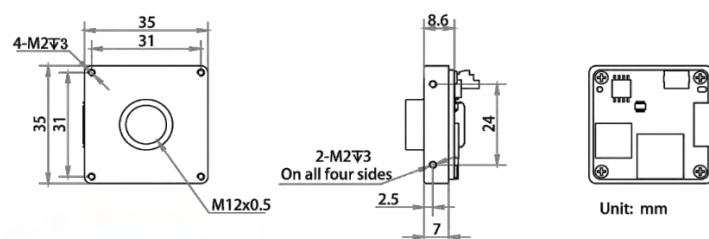


GEN<i>CAM

US3 VISION

## Introduction

MV-CB120-10UM/UC-S camera adopts Sony IMX226 sensor to provide high-quality image. It adopts M12-mount and is small in size, which can meet different spatial requirements.

## Key Feature

- Single board design for flexible installation
- Supports auto and manual adjustment for gain, exposure control, white balance, LUT, Gamma correction, etc.
- Adopts image interpolation algorithm for color camera to have better color correction
- Compatible with USB3 Vision Protocol, GenlCam standard, and the third-party software based on these protocol and standard
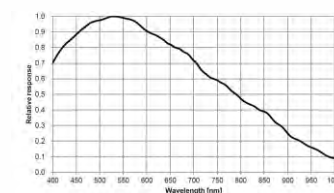
## Available Model

Mono camera: MV-CB120-10UM-S
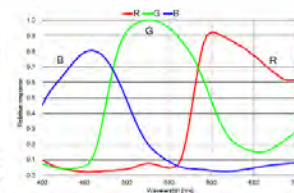Color camera: MV-CB120-10UC-S

## Applicable Industry

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

## Sensor Quantum Efficiency



MV-CB120-10UM-S          MV-CB120-10UC-S

## Dimension

# Specification

| Model | MV-CB120-10UM-S | MV-CB120-10UC-S |
|---|---|---|
| *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 | 28 fps @4032 × 3036 | 21 fps@4032 × 3036 |
| Dynamic range | 70.5 dB | |
| SNR | 40.5 dB | |
| Gain | 0 dB to 20 dB | |
| Exposure time | 11 μs to 2 s | 23 μs to 2 s |
| Shutter mode | Off/ Once /Continuous exposure mode | |
| Mono/Color | Mono | Color |
| Pixel format | Mono 8/10/10p/12/12p | Mono8/10/12, Bayer RG 8/10/10p/12/12p YUV 422 Packed, YUV422_YUYV_Packed, RGB8 |
| Acquisition mode | Continuous mode and SingleFrame mode | |
| Binning | Not support | |
| Decimation | Supports 1 × 2, 2 × 1, 2 × 2 | Not support |
| Reverse image | Supports horizontal and vertical reverse image output | |
| *Electrical features* | | |
| Data interface | USB3.0 | |
| Digital I/O | Bi-directional non-isolated I/O x 2 (Line1, Line2) | |
| Power supply | USB3.0 power supply | |
| Power consumption | < 2.45 W@5 VDC | |
| *Structure* | | |
| Lens mount | M12-Mount | |
| Dimension | 35 mm x 35 mm x 8.6 mm (1.4" x 1.4" x 0.3") | |
| Weight | Approx. 30 g ( 0.07 lb) | |
| 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, without condensation | |
| *General* | | |
| Client software | MVS or third-party software with USB3 Vision Protocol | |
| Operating system | 32/64-bit Windows XP/7/10, 32/64-bit Linux | |
| Compatibility | USB3 Vision, GenICam | |
| Certification | CE, FCC, RoHS, KC | |