

MV-CB013-20UM/UC-C

1.3 MP 1/2" CMOS USB3.0 Board Level Camera



GEN*i*CAM

USBTM
VISION

Introduction

MV-CB013-20UM/UC-C camera adopts OnSemi PYTHON1300 sensor and has high frame rate. It adopts C-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, 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

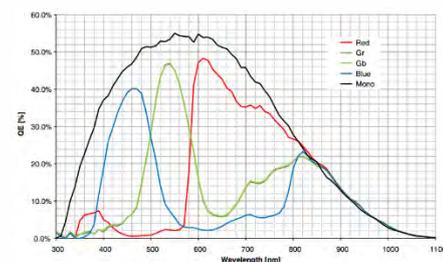
Available Model

Mono camera: MV-CB013-20UM-C
Color camera: MV-CB013-20UC-C

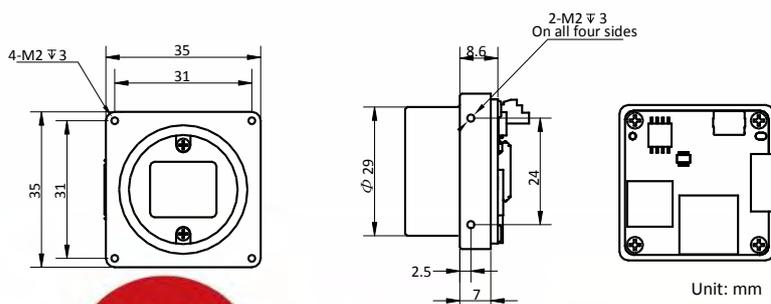
Applicable Industry

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

Sensor Quantum Efficiency



Dimension



Specification

Model	MV-CB013-20UM-C	MV-CB013-20UC-C
Camera		
Sensor type	CMOS, global shutter	
Sensor model	OnSemi PYTHON1300	
Pixel size	4.8 μm \times 4.8 μm	
Sensor size	1/2"	
Resolution	1280 \times 1024	
Max. frame rate	170 fps @1280 \times 1024	
Dynamic range	59.6 dB	
SNR	39.8 dB	
Gain	0 dB to 15 dB	
Exposure time	40 μs to 10 s	65 μs to 10 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
Binning	Supports 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \times 2, 4 \times 4	Not support
Decimation	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 \times 2 (Line 1, Line 2)	
Power supply	USB3.0 power supply	
Power consumption	< 2.28 W@5 VDC	
Structure		
Lens mount	C-Mount	
Dimension	35 mm \times 35 mm \times 8.6 mm (1.4" \times 1.4" \times 0.3")	
Weight	Approx. 30 g (0.07 lb.)	
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)	
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	

HIKROBOT

Hangzhou Hikrobot Technology Co., Ltd.
No.399 Danfeng Road, Binjiang District, Hangzhou 310051, China.
en.hikrobotics.com

MaxxVision®

Sigmaringer Str. 121
70567 Stuttgart
Tel.: 0711 997 996 3
www.maxxvision.com

Copyright Hikrobot

Hangzhou Hikrobot Technology Co., Ltd. All Rights Reserved. Hangzhou Hikrobot Technology does not tolerate any infringement. Any organization or individual may not imitate or reproduce in whole or in part of the content. The data herein is based on Hikrobot's internal evaluation. Actual data may vary depending on specific configuration and operating condition. The information herein is subject to change without notice. All the content has been checked conscientiously. Nevertheless, Hikrobot shall not be liable to damages resulting from errors, inconsistencies or omissions.