HC-CB060-10UM/UC

6 MP 1/1.8" CMOS USB3.0 Board Level Camera

GEN<i>CAM

US3 VISION

Introduction

HC-CB060-10UM/UC camera adopts Sony® IMX178 sensor to provide high-quality image. With single board design, it is small in size, which can meet different spatial requirements.
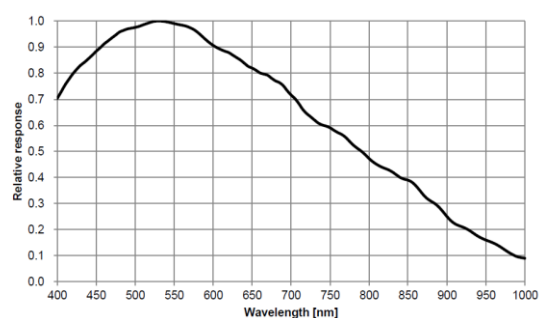
Key Feature

- Compact 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, GenlCam standard, and the third-party software based on these protocol and standard.
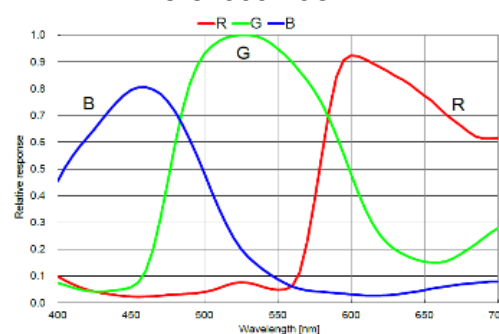
Available Model

- Single board mono camera: HC-CB060-10UM-B
- Single board color camera: HC-CB060-10UC-B
- C-mount mono camera: HC-CB060-10UM-C
- C-mount color camera: HC-CB060-10UC-C
- M12-mount mono camera: HC-CB060-10UM-S
- M12-mount color camera: HC-CB060-10UC-S

Sensor Quantum Efficiency

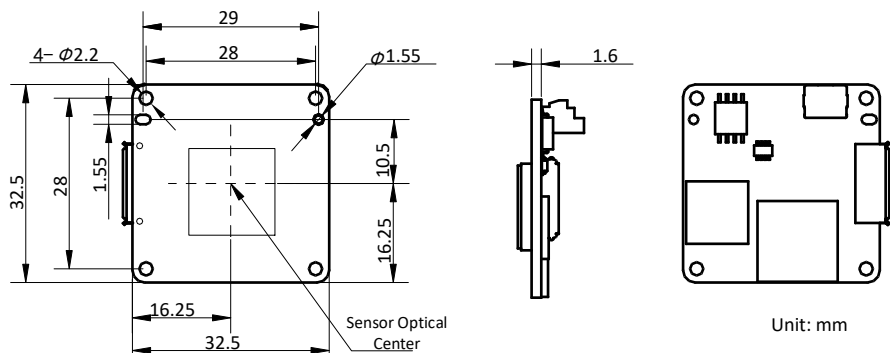
HC-CB060-10UM

HC-CB060-10UC

Applicable Industry

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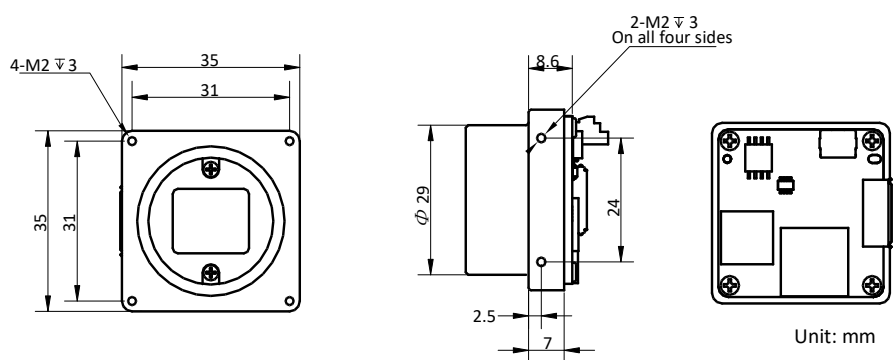
Specification

Model	HC-CB060-10UM	HC-CB060-10UC
Camera		
Sensor type	CMOS, rolling shutter	
Sensor model	Sony® IMX178	
Pixel size	2.4 μm × 2.4 μm	
Sensor size	1/1.8"	
Resolution	3072 × 2048	
Max. frame rate	17 fps @3072 × 2048	29 fps @3072 × 2048
Dynamic range	71.3 dB	
SNR	41.3 dB	
Gain	0 dB to 20 dB	
Exposure time	27 μs to 2.5 sec	16 μs to 2.5 sec (Bayer) 24 μs to 2.5 sec (other pixel formats)
Exposure mode	Supports Off/ Once/ Continuous exposure mode, and Global Reset.	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10p/12/12p	Mono8/10/12, Bayer RG 8/10/10p/12/12p YUV422Packed, YUV422_YUYV_Packed, RGB 8
Binning	Supports 1 × 1, 2 × 2	
Decimation	Not support	
Reverse image	Supports horizontal reverse image output	
Electrical feature		
Data interface	USB3.0	
Digital I/O	Bi-directional non-isolated I/O x 2 (Line 1, Line 2)	
Power supply	USB3.0 power supply	
Power consumption	Typ. 2.0 W@5 VDC	
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 70 °C (-22 °F to 158 °F)	
Humidity	20% to 80% RH, non-condensing	
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	

Dimension

Single board camera:

4− Φ2.2 | 29 | 28 | φ1.55 | 1.6

32.5 | 28 | 1.55 | 10.5 | 16.25

16.25 | 32.5

Sensor Optical Center

Unit: mm

C-mount camera:

4-M2 ∇ 3 | 35 | 31 | 2-M2 ∇ 3 On all four sides | 8.6

35 | 31 | Φ 29 | 24

2.5 | 7

Unit: mm

M12-mount camera:

4-M2∇3 | 35 | 31 | 8.6

35 | 31 | 24

M12x0.5 | 2-M2∇3 On all four sides

2.5 | 7

Unit: mm