

ACU3R-060059C/M

6 MP 1/1.8" CMOS USB3.0 Area Scan Camera



GEN*i*CAM

US3TM
VISION

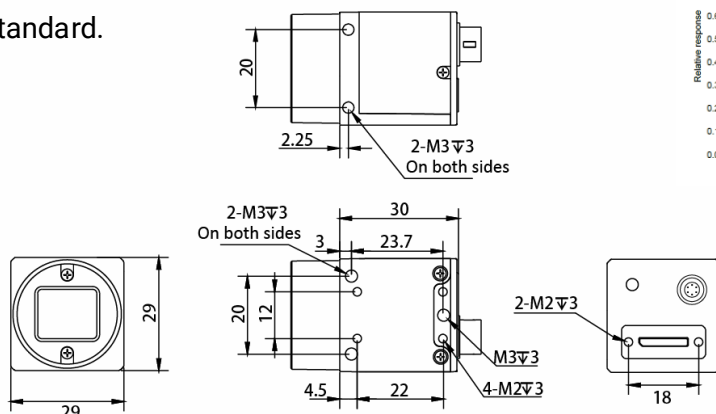
Introduction

ACU3R-060059C/M camera adopts Sony® IMX178 sensor to provide high-quality images. It uses USB3.0 interface to transmit images in real time, and its max. frame rate can reach 59.6 fps in full resolution.

Key Feature

- Adopts brand new design to reduce power consumption.
- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Adopts Sony® IMX178 sensor to provide high sensitivity, wide dynamic range, and low noise.
- Supports image compression mode and noise reduction function.
- Adopts active alignment techniques for assembling.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

Dimension



Unit: mm

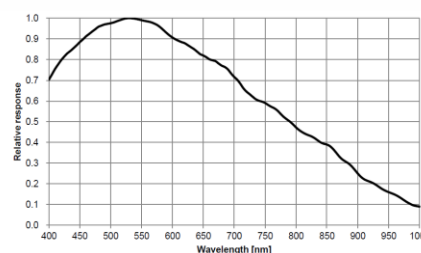
Available Model

- Mono camera: ACU3R-060059M
- Color camera: ACU3R-060059C

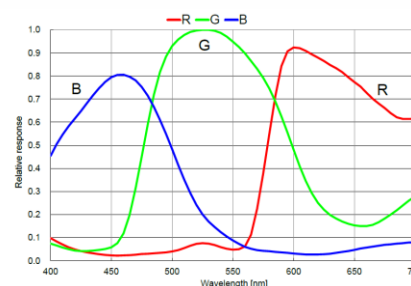
Applicable Industry

SMT/ PCB AOI, consumer electronics, electrical semiconductor, etc.

Sensor Quantum Efficiency



ACU3R-060059M



ACU3R-060059C



Specification

Model	ACU3R-060059M		ACU3R-060059C
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	59.6 fps @3072 × 2048		
Dynamic range	71.3 dB		
SNR	41.3 dB		
Gain	0 dB to 24 dB		
Exposure time	32 μs to 1 sec		
Exposure mode	Off/Once/Continuous exposure mode, supports Global Reset, Trigger Rolling, and Rolling		
Mono/color	Mono	Color	
Pixel format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8	
Binning	Supports 1 × 1, 2 × 2		
Decimation	Supports 1 × 1, 2 × 2, 4 × 4		
Reverse image	Supports horizontal and vertical reverse image output		
Electrical features			
Data interface	USB3.0, compatible with USB2.0		
Digital I/O	6-pin Hirose connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2).		
Power supply	9 VDC to 24 VDC, supports USB3.0 power supply		
Power consumption	Typ. 2.3 W@5 VDC (USB3.0 provides power supply)	Typ. 2.5 W@5 VDC (USB3.0 provides power supply)	
Mechanical			
Lens mount	C-Mount		
Dimension	29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2")		
Weight	Approx. 80 g (0.18 lb.)		
Ingress protection	IP40 (under proper lens installation and wiring)		
Temperature	Working temperature: -30 °C to 60 °C (-22 °F to 140 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)		
Humidity	20% to 95% RH, non-condensing		
General			
Client software	MVS or third-party software meeting with USB3 Vision Protocol		
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS		
Compatibility	USB3 Vision, GenICam		
Certification	CE, FCC, RoHS, KC		

HIKROBOT

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