MV-CA016-10UM/UC
1.6 MP, 1/2.9" CMOS, USB3.0 Camera

Introduction

MV-CA016-10UM/UC adopts IMX273 CMOS sensor and provides high quality image. The USB3.0 interface provides high-speed real-time transmission of uncompressed data with the maximum frame rate reaching 165.9 fps at full resolution.
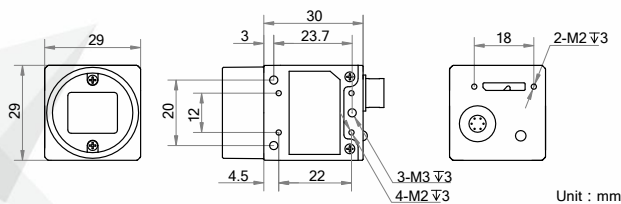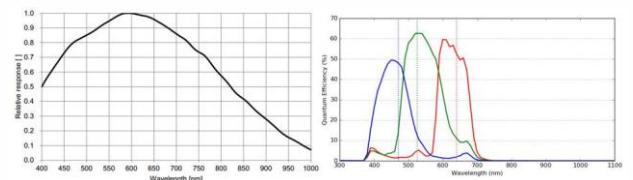
GEN<i>CAM

US3 VISION

Key Feature

- Supports auto and manual adjustment for exposure control, LUT, Gamma correction, and etc.
- Supports hardware triggering and software triggering
- Compatible with USB3 Vision Protocol and third-party software meeting with the protocol and standard
- Power supply and data transmission via USB3.0 interface
- Compact design for flexible installation

Dimension

Unit : mm

Sensor Quantum Efficiency

MV-CA016-10UM/UC

Applicable Industry

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

Available Model

- Mono camera: MV-CA016-10UM
- Color camera: MV-CA016-10UC

Specification

Model Parameters	MV-CA016-10UM	MV-CA016-10UC
	1.6 MP 1/2.9" CMOS USB3.0 Camera	
Camera		
Sensor type	CMOS, global shutter	
Sensor model	IMX273	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	1/2.9"	
Resolution	1440 x 1080	
Frame rate	165.9 fps	
Dynamic range	71 dB	
SNR	40 dB	
Gain	0 dB to 17 dB	
Exposure time	16 μs to 10 s	
Shutter mode	Off/Once/Continuous exposure mode	
Reverse image	Supports horizontal and vertical reverse image output	
Image buffer	128 MB	
Pixel format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, YUV422_YUYV_Packed, YUV 422 Packed, RGB8
Electrical features		
Data interface	USB 3.0, compatible with USB 2.0	
Digital I/O	Opto-isolated input x 1, Opto-isolated output x 1, Bi-directional non-isolated I/O x 1	
Power supply	5 VDC to 15 VDC, supports USB 3.0 power supply	
Power consumption	< 3 W @5 VDC	
Structure		
Lens mount	C-Mount	
Dimension	29 mm × 29 mm × 30 mm (1.14" × 1.14" × 1.18")	
Weight	< 56 g (0.12 lb.)	
Ingress protection	IP30 (under correct lens installation and wiring)	
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 compatible with USB3 Vision Protocol	
Operation system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS	
Compatibility	USB3 Vision	
Certifications	CE, FCC, RoHS, KC	