MV-CA003-20GM/GC

0.3 MP 1/4" CMOS GigE Area Scan Camera

GEN<i>CAM

GigE VISION®

Introduction

MV-CA003-20GM/GC adopts PYTHON300 sensor to provide high quality image. The GigE interface provides high-speed real-time transmission of uncompressed data with the maximum frame rate reaching 300 fps at full resolution.

Key Feature

- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Up to 128 MB local memory for burst transmission and retransmission.
- Supports auto exposure control, LUT, Gamma correction, etc.
- Supports hardware trigger, software trigger, etc.
- Compatible with GigE Vision V1.2 Protocol and the third-party software based on the protocol.
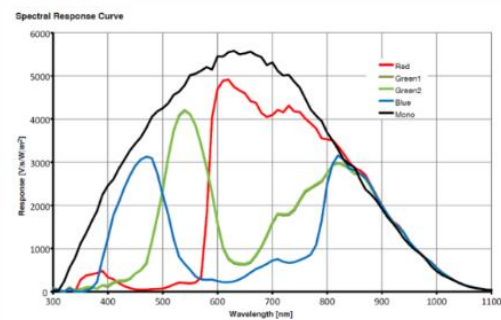
Available Model

- Mono camera: MV-CA003-20GM
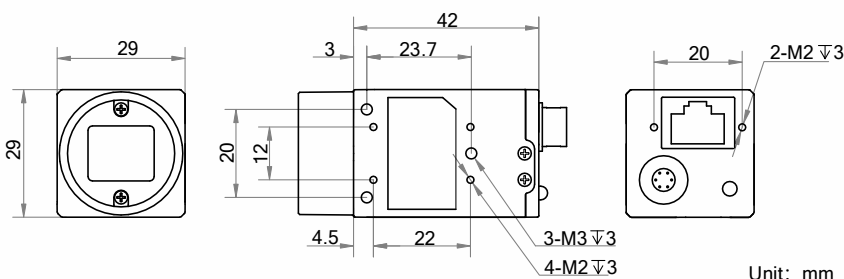- Color camera: MV-CA003-20GC

Applicable Industry

Electronic semiconductor, factory automation, quality inspection, etc.

Sensor Quantum Efficiency

Dimension

Unit: mm

Specification

Model	MV-CA003-20GM	MV-CA003-20GC
Camera		
Sensor type	CMOS, global shutter	
Sensor model	PYTHON300	
Pixel size	4.8 μm × 4.8 μm	
Sensor size	1/4"	
Resolution	672 × 512	
Max. frame rate	344 fps @672 × 512	336 fps @672 × 512
Dynamic range	59 dB	
SNR	39.9 dB	
Gain	0 dB to 15 dB	
Exposure time	49 μs to 10 sec	40 μs to 10 sec
Exposure 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, RGB 8
Binning	Supports 1 × 1, 1 × 2, 2 × 1, 1 × 4, 4 × 1, 2 × 2, 2 × 4, 4 × 2, 4 × 4	
Decimation	Supports 1 × 1, 2 × 2	
Reverse image	Supports horizontal and vertical reverse image output	
Image buffer	128 MB	
Electrical feature		
Data interface	Gigabit Ethernet, compatible with Fast Ethernet	
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	12 VDC, supports PoE	
Power consumption	Typ. 2.6 W @ 12 VDC	
Mechanical		
Lens mount	C-Mount	
Dimension	29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")	
Weight	Approx. 68 g (0.15 lb.)	
Ingress protection	IP30 (under proper 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, non-condensing	
General		
Client software	MVS or third-party software meeting with GigE Vision Protocol	
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS	
Compatibility	GigE Vision V1.2, GenICam	
Certification	CE, FCC, RoHS, KC	