

MV-CA013-20GM/GC/GN

1.3 MP 1/2" CMOS GigE Area Scan Camera



GEN*<i>i</i>*CAM

GigE
VISION

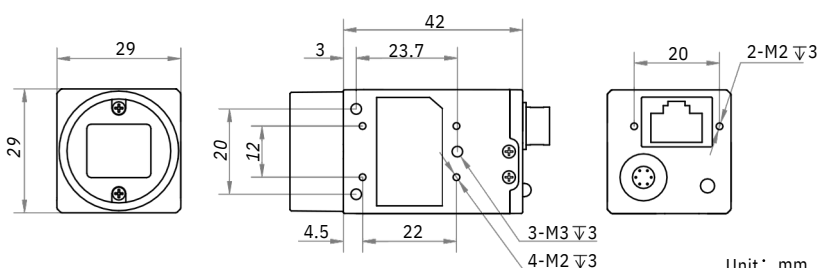
Introduction

MV-CA013-20GM/GC/GN camera adopts OnSemi[®] Mono camera: MV-CA013-20GM PYTHON1300 sensor to provide high-quality image. It uses[®] Color camera: MV-CA013-20GC GigE interface to transmit non-compressed images in real[®] Near-infrared camera: MV-CA013-20GN time with max. frame rate reaching 90 fps.

Key Feature

- ☐ Adopts GigE interface and max. transmission distance of 100 meters without relay.
- ☐ Supports auto and manual adjustment for exposure control, LUT, Gamma correction, etc.
- ☐ Up to 128 MB local memory for burst transmission and retransmission.
- ☐ Supports hardware trigger, software trigger, etc.
- ☐ Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software basedon protocol and standard.

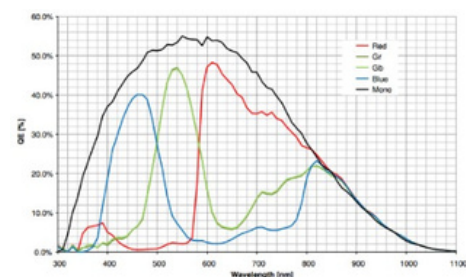
Dimension



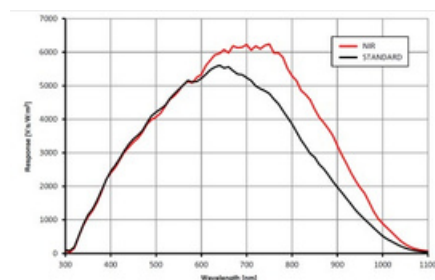
Available Model

Electronic semiconductor, factory automation, food and beverage, medical packaging, etc.

Sensor Quantum Efficiency



MV-CA013-20GM/GC



MV-CA013-20GN

Specification

Model		Camera	MV-CA013-20GM	MV-CA013-20GC	MV-CA013-20GN
Sensor type Sensor					
model	Pixel	size	CMOS, global shutter		
Sensor		size	OnSemi PYTHON1300		
Resolution	Max.	4.8 μm × 4.8 μm			
frame rate	Dynamic	1/2"			
range	SNR	Gain	1280 × 1024		
Exposure	time	90 fps @ 1280 × 1024			
Exposure	mode	59.6 dB			
Mono/color	Pixel	39.8 dB			
format		0 dB to 15 dB			
		38 μs to 10 sec		62 μs to 10 sec	38 μs to 10 sec
		Off/Once/Continuous exposure mode			
		Mono		Color	Near-infrared
		Mono 8/10/10p/12/12p		Mono 8/10/12, Bayer RG 8/10/10p/12/12p, YUV422Packed , YUV422_YUYV_Packed, RGB 8	Mono 8/10/10p/12/12p
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. 2.7 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% RH to 80% RH (no condensation)			
General					
Client software		MVS or third-party software meeting with GigE Vision Protocol			
Operating system		32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux			
Compatibility		GigE Vision V2.0, GenICam			
Certification		CE, RoHS, KC			