

MV-CA013-20GM/GC/GN

1.3 MP 1/2" CMOS GigE Area Scan Camera



GEN*<i>i>*CAM

GIG*E*
VISION

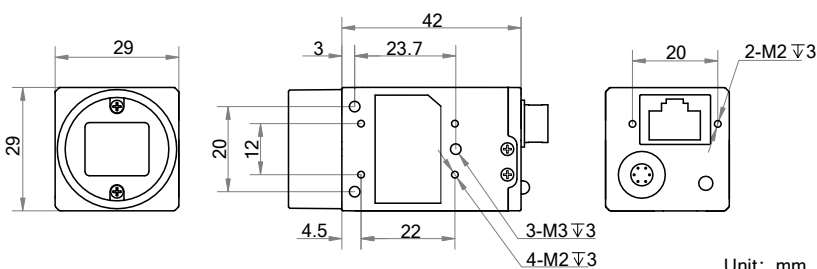
Introduction

MV-CA013-20GM/GC/GN camera adopts OnSemi PYTHON1300 sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real 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 based on protocol and standard.

Dimension



Unit: mm

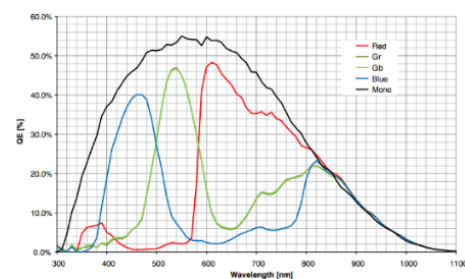
Available Model

- Mono camera: MV-CA013-20GM
- Color camera: MV-CA013-20GC
- Near-infrared camera: MV-CA013-20GN

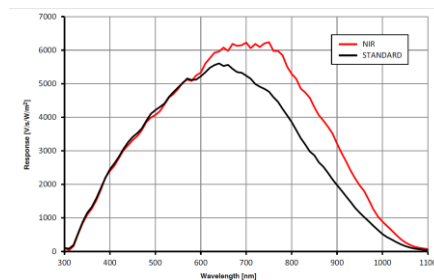
Applicable Industry

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

Sensor Quantum Efficiency



MV-CA013-20GM/GC



MV-CA013-20GN

Specification

Model	MV-CA013-20GM	MV-CA013-20GC	MV-CA013-20GN
Camera			
Sensor type	CMOS, global shutter		
Sensor model	OnSemi PYTHON1300		
Pixel size	4.8 μm × 4.8 μm		
Sensor size	1/2"		
Resolution	1280 × 1024		
Max. frame rate	90 fps @ 1280 × 1024		
Dynamic range	59.6 dB		
SNR	39.8 dB		
Gain	0 dB to 15 dB		
Exposure time	38 μs to 10 sec	62 μs to 10 sec	38 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode		
Mono/color	Mono	Color	Near-infrared
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	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		