HIKROBOT

MV-CA013-20GM/GC/GN

1.3 MP 1/2" CMOS GigE Area Scan Camera



GEN**<i>**CAM



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, GenlCam Standard, and third-party software based on protocol and standard.

Dimension



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



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Specification

Model	MV-CA013-20GM	MV-CA013-20GC	MV-CA013-20GN
Camera			<u> </u>
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	Mono 8/10/12, Bayer RG	
		8/10/10p/12/12p,	
	8/10/10p/12/12p	YUV422Packed,	Mono 8/10/10p/12/12p
		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 C		
	opto-isolated output \times 1 (Line 1), bi-directional non-isolated I/O \times 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% 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 V2.0, GenlCam		
Certification	CE, FCC, RoHS, KC		

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