HIKROBOT

MV-CA013-20GN

1.3 MP 1/2" CMOS Near-Infrared GigE Area Scan Camera

GEN<i>CAM

GigE VISION

Introduction

MV-CA013-20GN camera adopts OnSemi PYTHON1300 CMOS 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 triggering and software triggering
- Compatible with GigE Vision Protocol V2.0, GenlCam Standard, and third-party software based on these protocol and standard
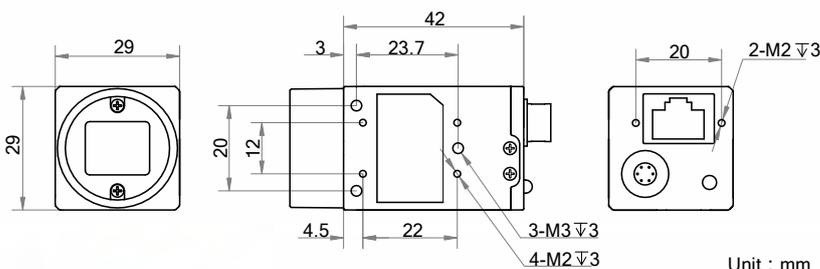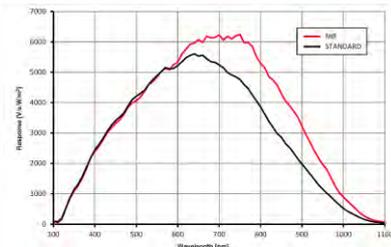
Available Model

MV-CA013-20GN

Applicable Industry

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

Sensor Quantum Efficiency

Dimension

Unit : mm

Specification

Model	MV-CA013-20GN
Camera	
Sensor type	CMOS, global shutter
Sensor model	OnSemi PYTHON1300
Pixel size	4.8 µm x 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 s
Shutter mode	Off/Once/Continuous exposure mode
Mono/color	Near-infrared
Pixel format	Mono 8/10/10p/12/12p
Binning	Supports 1 x 2, 1 x 4, 2 x 1, 2 x 2, 2 x 4, 4 x 1, 4 x 2, 4 x 4
Decimation	Supports 2 x 2
Reverse image	Supports horizontal and vertical reverse image output
Image buffer	128 MB
Electrical features	
Data interface	Gigabit Ethernet
Digital I/O	6-pin Hirose connector provides power and I/O, including opto-isolated input x 1 (Line0), opto-isolated output x 1(Line1), and bi-directional non-isolated I/O x 1 (Line2)
Power supply	5 VDC to 15 VDC, supports PoE power supply
Power consumption	< 2.7 W@12 VDC
Structure	
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, without condensation
General	
Client software	MVS or third-party software meeting with GigE Vision Protocol
Operation system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS
Compatibility	GigE Vision V2.0, GenICam
Certifications	CE, FCC, RoHS, KC