HC-CA050-20GM/GC/GN

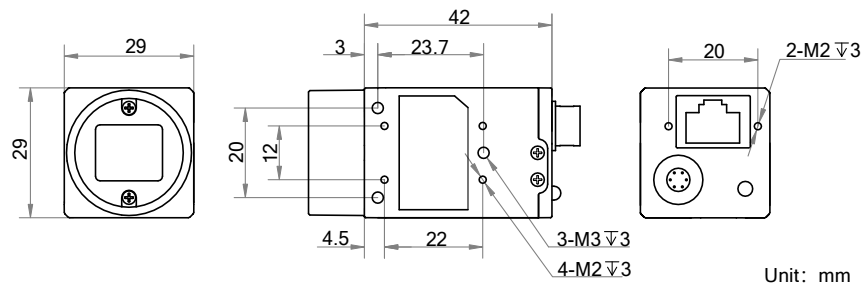**5 MP 1" CMOS GigE Area Scan Camera**

GEN<i>CAM

GigE VISION®

Introduction

HC-CA050-20GM/GC/GN camera is a high quality device that can be used in a variety of applications, including electronic semiconductor fabrication, factory automation, quality inspection, etc.

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.
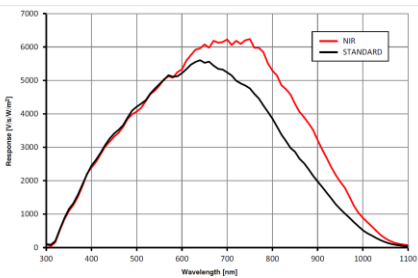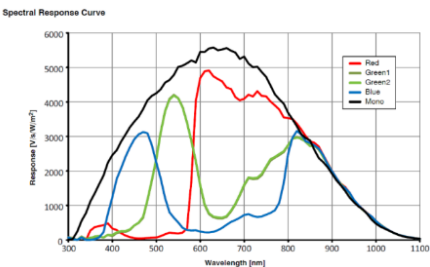
Dimension

Unit：mm

Available Model

- Mono camera:HC-CA050-20GM
- Color camera: HC-CA050-20GC
- Near-infrared camera: HC-CA050-20GN

Applicable Industry

Electronic semiconductor, factory automation, quality inspection, etc.

Sensor Quantum Efficiency

HC-CA050-20GM/GC

HC-CA050-20GN

Specification

Model	HC-CA050-20GM	HC-CA050-20GC	HC-CA050-20GN
Camera			
Sensor type	CMOS, global shutter		
Sensor model	PYTHON5000		
Pixel size	4.8 μm × 4.8 μm		
Sensor size	1"		
Resolution	2592 × 2048		
Max. frame rate	22 fps @2592 × 2048		
Dynamic range	57.5 dB		
SNR	39.5 dB		
Gain	0 dB to 15 dB	0 dB to 10 dB	0 dB to 15 dB
Exposure time	65 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 BG 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. 3.3 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		