MV-CT089G-13GM/GC01

8.9 MP GigE Area Scan Camera

Introduction

Designed for industrial applications, MV-CT089G-13GM/GC01 camera offers industry-leading performance and reliability, with various versions to meet diverse application needs. It supports IP67 protection and expanded interfaces, creating a more flexible and efficient system.

Key Feature

- The device with PRO version supports waterproof connector.
- The device with PRO version adopts precision temperature control design for fast heat equilibrium.
- The color device with PRO version supports auto color correction based on multi-spectral fusion technology.
- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Adopts new-generation structure design, supporting installation on four sides.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.
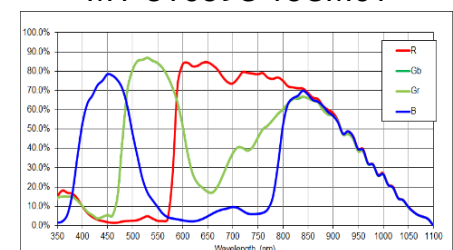
Available Model

- Mono camera (BASE): MV-CT089G-13GM01-BASE
- Color camera (BASE): MV-CT089G-13GC01-BASE
- Mono camera (PRO): MV-CT089G-13GM01-PRO
- Color camera (PRO): MV-CT089G-13GC01-PRO

Sensor Quantum Efficiency
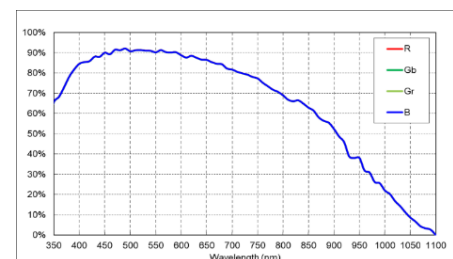
MV-CT089G-13GM01

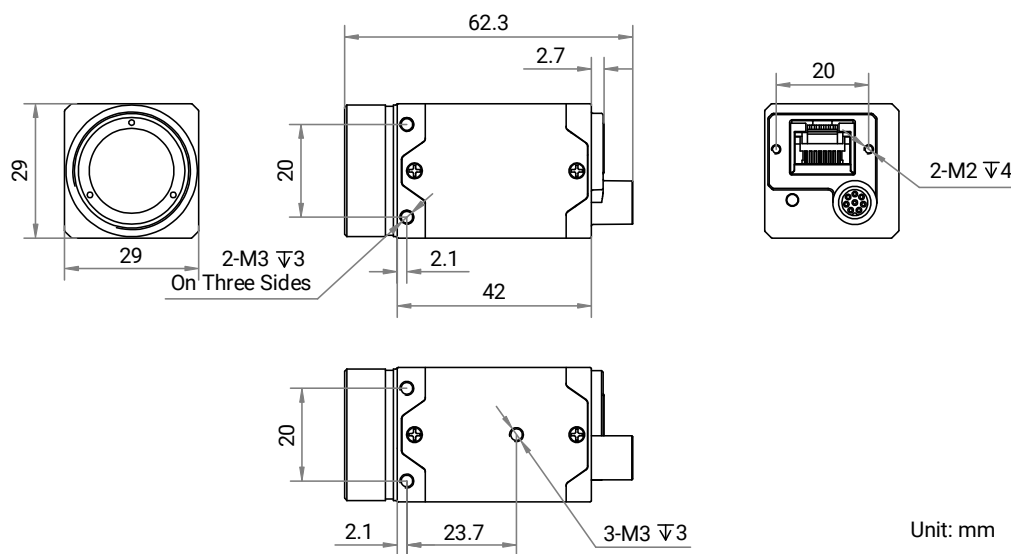MV-CT089G-13GC01

Applicable Industry

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

Specification

Model	MV-CT089G-13GM01	MV-CT089G-13GC01
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	1"	
Resolution	4096 × 2160	
Max. frame rate	13.9 fps @ 4096 × 2160 Mono 8 32.5 fps @ 4096 × 2160 Mono 8 (PRO: image compression mode enabled)	13.9 fps @ 4096 × 2160 Bayer GB 8 32.5 fps @ 4096 × 2160 Bayer GB 8 (PRO: image compression mode enabled)
Dynamic range	67.2 dB	
SNR	44.2 dB	
Gain	0 dB to 12 dB	
Exposure time	UltraShort exposure mode: 10 μs to 19 μs Standard exposure mode: 20 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode, supports Trigger Width and Trigger Controlled	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8, Bayer GB 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Supports 1 × 1, 2 × 2, 4 × 4	
Decimation	Supports 1 × 1, 2 × 2, 4 × 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)	
Data interface type	BASE: RJ45 connector, PRO: M12 waterproof aviation connector	
Digital I/O	8-pin M8 aviation 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	9 VDC to 24 VDC, supports PoE	
Power consumption	BASE: Typ. 1.7 W @ 12 VDC PRO: Typ. 1.8 W @ 12 VDC (fast heat equilibrium not enabled)	BASE: Typ. 1.8 W @ 12 VDC PRO: Typ. 1.9 W @ 12 VDC (fast heat equilibrium not enabled)
Mechanical		
Lens mount	C-mount	
Dimension	29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")	
Weight	BASE: Approx. 116 g (0.3 lb.), PRO: Approx. 124 g (0.3 lb.)	
Ingress protection	BASE: IP40 (under proper lens installation and wiring) PRO: IP67 (under proper lens installation and wiring)	
Temperature	Working temperature: −30 °C to 60 °C (−22 °F to 140 °F) Storage temperature: −30 °C to 80 °C (−22 °F to 176 °F)	
Humidity	20% RH to 95% 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	

Dimension

BASE

2-M3 ▽3
On Three Sides

62.3

2.7

29

29

20

20

2.1

42

20

2.1 23.7

3-M3 ▽3

20

2-M2 ▽4

Unit: mm

PRO

29

29

20

2.1

42

59.76

63.01

M12x1

M8x1

2-M3 ▽3
On Four Sides

4.7

M28x1

20

2.1 23.7

M3▽3

Unit: mm