MV-CT*M/CG0050/G

5 MP GigE Area Scan Camera







Introduction

Designed for industrial applications, MV-CT*M/CG0050/G camera offers industry-leading performance and reliability, with various versions to meet diverse application needs. It supports IP67 protection, expanded interfaces, and integration of liquid/electric lenses, light sources, and lens cap, creating a more flexible and efficient system.

Key Feature

- The devices with PRO version and MAX version support waterproof connector.
- The devices with PRO version and MAX version adopt precision temperature control design for fast heat balance.
- The color devices with PRO version and MAX version support auto color correction based on multi-spectral fusion technology.
- The device with MAX version integrates lens and light source, enabling lens focusing and light source control.
- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

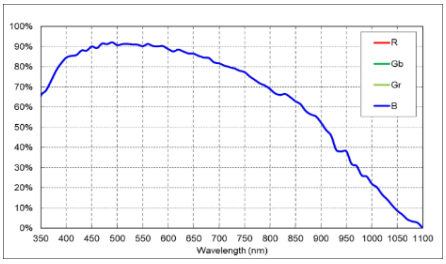
Applicable Industry

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

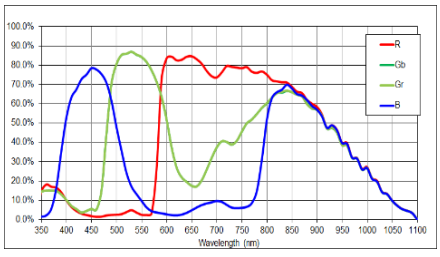
Available Model

- Mono camera (BASE): MV-CT0MG0050/G/NN/NN
- Color camera (BASE): MV-CT0CG0050/G/NN/NN
- Mono camera (PRO): MV-CT1MG0050/G/NN/NN
- Color camera (PRO): MV-CT1CG0050/G/NN/NN
- Mono camera (MAX): MV-CT2MG0050/G/NN/NN
- Color camera (MAX): MV-CT2CG0050/G/NN/NN

Sensor Quantum Efficiency



MV-CT*MG0050/G



MV-CT*CG0050/G

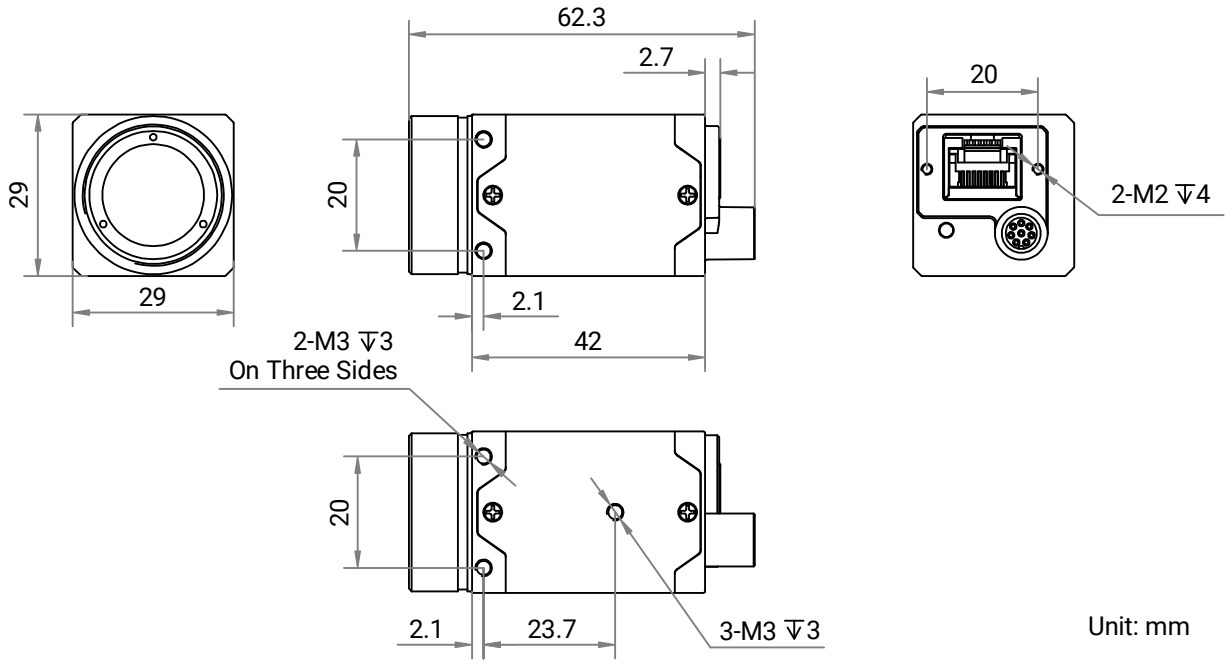
Specification

Model	MV-CT*MG0050/G	MV-CT*CG0050/G
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	2/3"	
Resolution	2448 × 2048	
Max. frame rate	24.5 fps @ 2448 × 2048 Mono 8 59.2 fps @ 2448 × 2048 Mono 8 (PRO + MAX: lossless compression mode enabled)	24.5 fps @ 2448 × 2048 Bayer GR 8 59.2 fps @ 2448 × 2048 Bayer GR 8 (PRO + MAX: lossless compression mode enabled)
Dynamic range	73.9 dB	
SNR	42.4 dB	
Gain	High full well capacity: 0 dB to 12.8 dB High sensitivity: 0 dB to 24 dB	
Exposure time	High full well capacity: 30 μs to 10 sec High sensitivity: 5 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 GR 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 + MAX: 8-pin M12 X-Code waterproof aviation connector	
Control interface	BASE + PRO: Not support MAX: 8-pin M12 A-Code waterproof aviation connector	
Digital I/O	8-pin M8 A-Code 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. 1.5 W @ 12 VDC PRO: Typ. 1.5 W @ 12 VDC (fast heat balance not enabled) MAX: Typ. 1.6 W @ 24 VDC (fast heat balance not enabled and external device not be controlled)	

Mechanical	
Lens mount	C-mount
Dimension	BASE + PRO: 29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7") MAX: 42 mm × 42 mm × 43 mm (1.7" × 1.7" × 1.7")
Weight	BASE: Approx. 116 g (0.3 lb.) PRO: Approx. 124 g (0.3 lb.) MAX: Approx. 120 g (0.3 lb.)
Ingress protection	BASE: IP40 (under proper lens installation and wiring) PRO + MAX: IP67 (under proper lens and lens cap 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

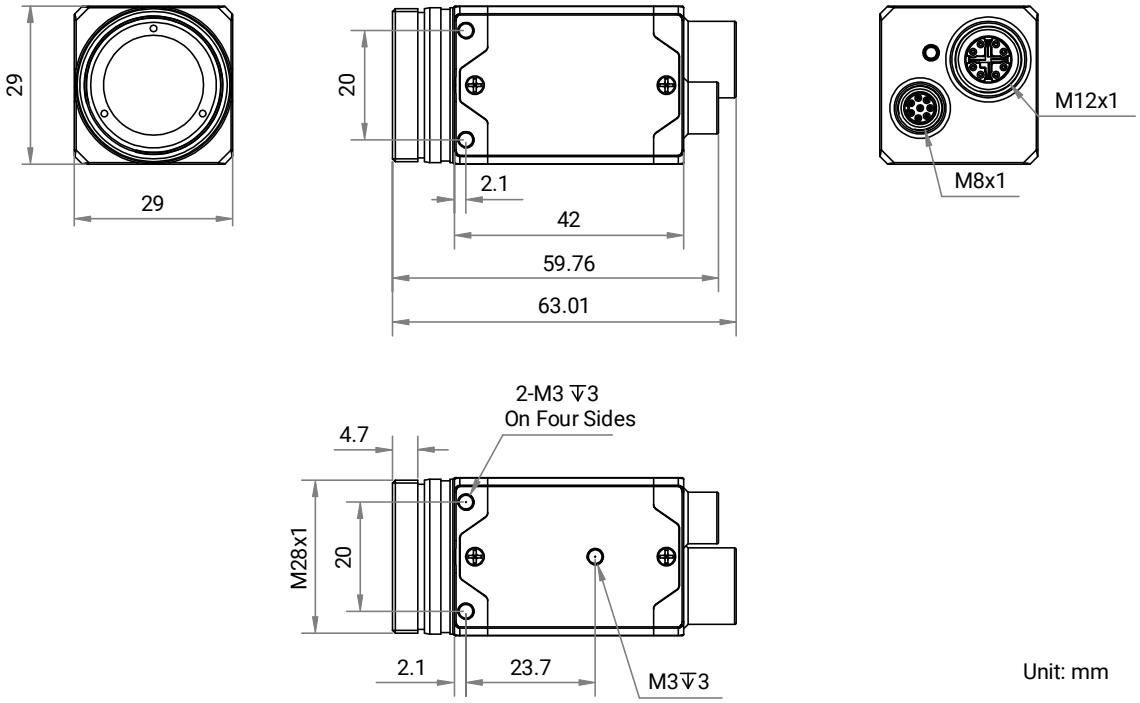
Dimension

BASE



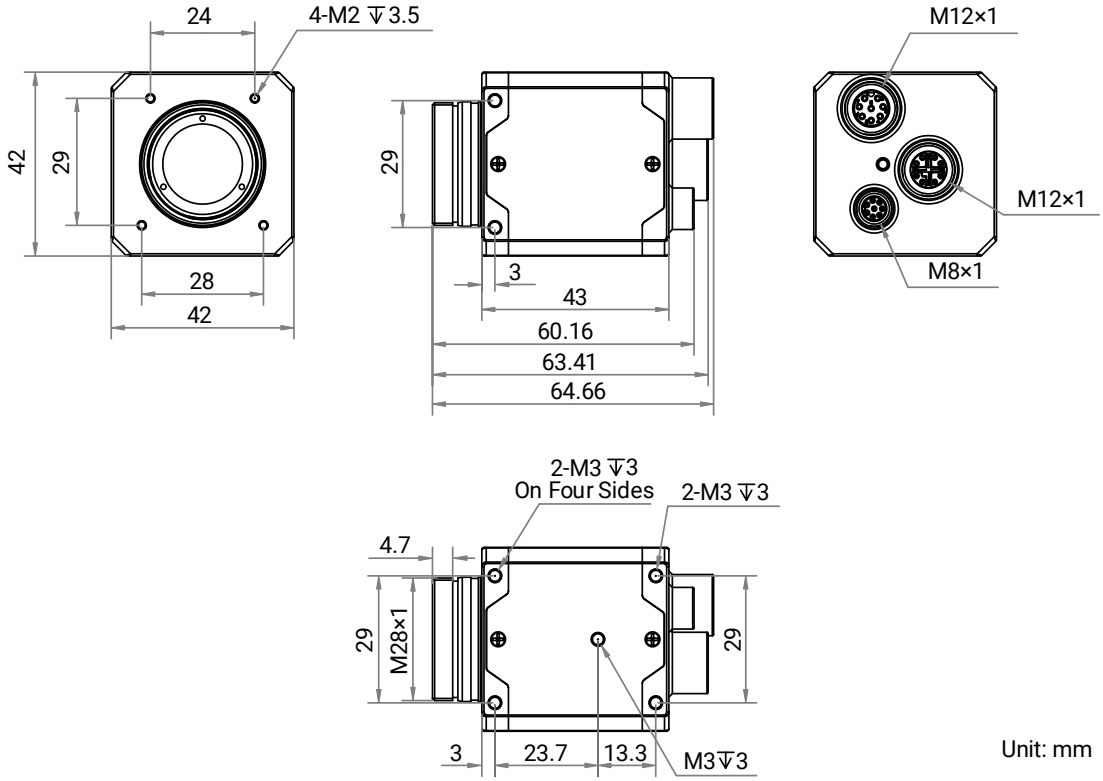
Dimension

PRO



Unit: mm

MAX



Unit: mm

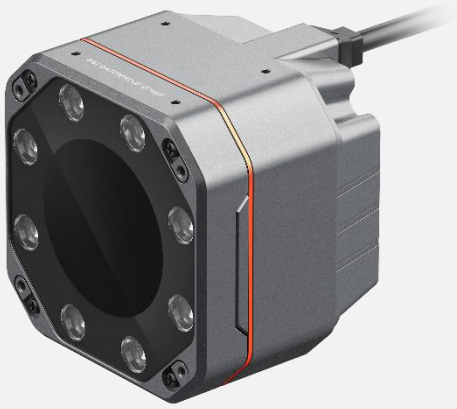
MaxxVision®
Sigmaringer Str. 121
70567 Stuttgart
Tel.: 0711 997 996 3
www.maxxvision.com

Hangzhou Hikrobot Co. Ltd.
en.hikrobotics.com

© Hangzhou Hikrobot Co., Ltd. All Rights Reserved.
Hangzhou Hikrobot does not tolerate any infringement. Any organization or individual may not imitate or reproduce in whole or in part of the content. The data herein is based on Hikrobot's internal evaluation. Actual data may vary depending on specific configuration and operating condition. The information herein is subject to change without notice All the content has been checked conscientiously. Nevertheless, Hikrobot shall not be liable to damages resulting from errors, inconsistencies or omissions.

MV-CT2M/CG0050/G/16LC/WN

Lens Cap



Introduction

MV-CT2M/CG0050/G/16LC/WN Lens Cap provides IP67 waterproof and dustproof protection for the lenses and light sources of CT series MAX version industrial cameras, and supports integration control of lens and light source. Also, the embedded light board is controlled by the camera. When paired with IP67-rated cables, it can withstand harsh industrial environments, ensuring reliable operation of the camera in the presence of dust, dirt, or water. Multiple specifications of liquid lenses are available to accommodate different autofocus scenarios.

Naming Rules

MV-CT2M/CG0050/G/16LC/WN

2: MAX version

16: focal length (mm)

L: liquid lens

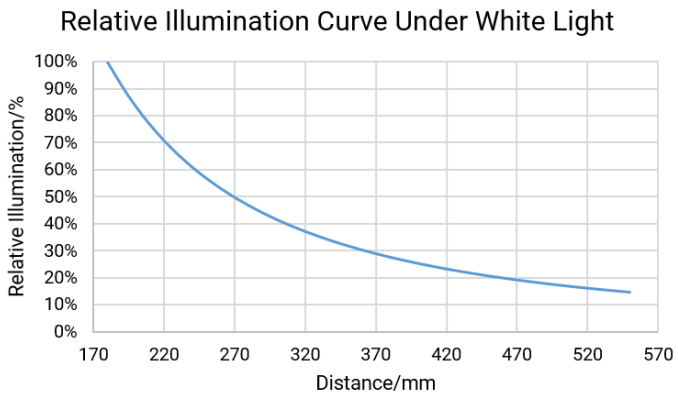
C: C-mount

W: white light

Key Features

- Provides IP67 protection (under proper installation of lens, lens cap, and cable).
- Supports C-mount liquid lenses.
- Provides the light board.
- Supports camera resolutions of up to 20 MP and sensor sizes of up to 1.1 inches.

Relative Illumination Curve Under White Light

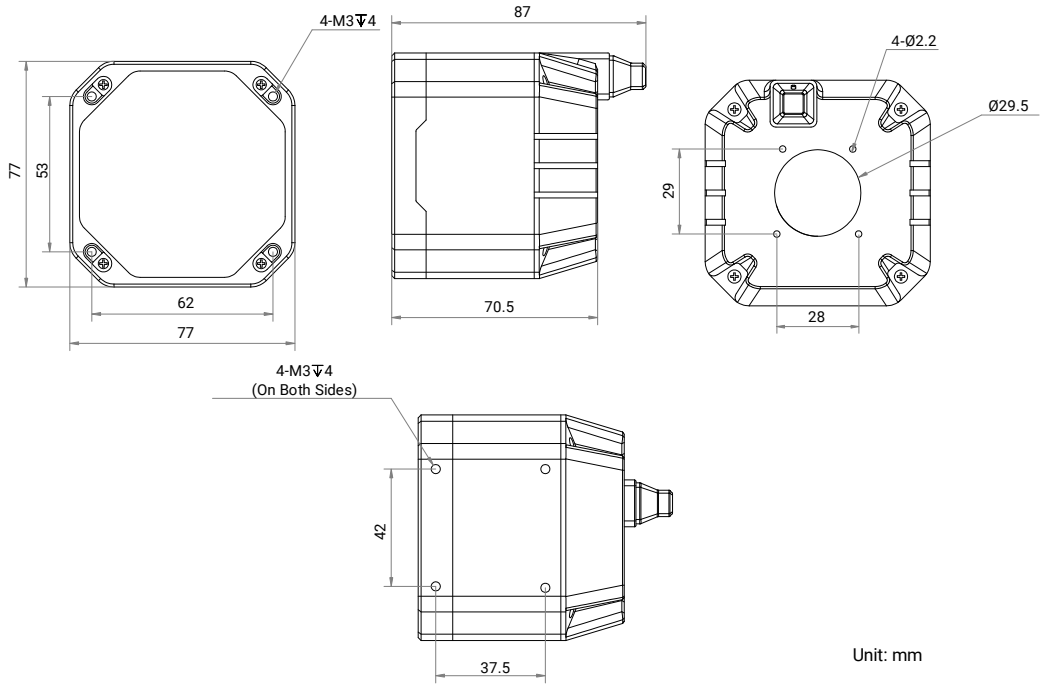


Specification

Model	MV-CT2M/CG0050/G/16LC/WN
Device compatibility	
Camera type supported	CT Series Area Scan Cameras (MAX version)
Light source	
Color	White
Color temperature	6000 K to 9000 K
Bore dimension	Ø38.5 mm
Irradiation angle	90° (to the horizontal direction)
Power	Approx. 7.7 W
Mechanical	
Outer length	70.5 mm
Inner length	66 mm
Weight	330 g (0.7 lb.)
Ingress protection	IP67(under proper installation of lens, lens cap, and cable)
Temperature	Working temperature: 0 °C to 40 °C (–22 °F to 104 °F) Storage temperature: –30 °C to 80 °C (–22 °F to 176 °F)
Humidity	20% RH to 95% RH (no condensation)

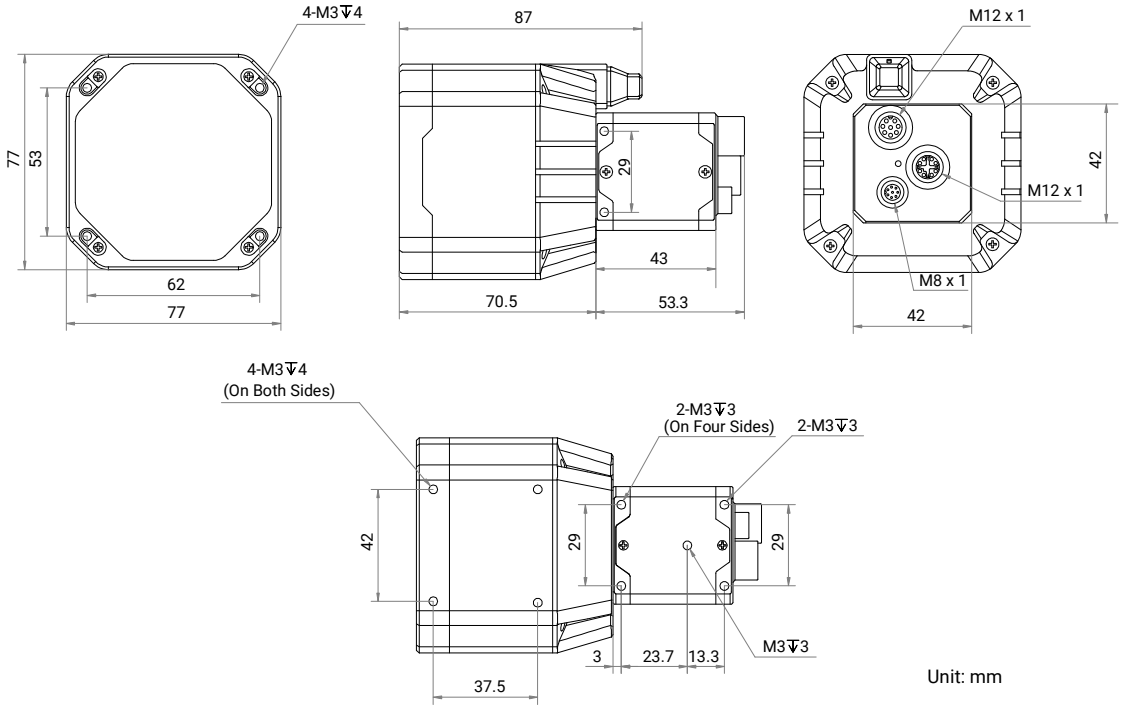
Dimension

Lens Cap



Unit: mm

MV-CT2M/CG0050/G/16LC/WN (Camera and Lens Cap)



Unit: mm

MaxxVision®
Sigmaringer Str. 121
70567 Stuttgart
Tel.: 0711 997 996 3
www.maxxvision.com

Hangzhou Hikrobot Co. Ltd.
en.hikrobotics.com

© Hangzhou Hikrobot Co., Ltd. All Rights Reserved.
Hangzhou Hikrobot does not tolerate any infringement. Any organization or individual may not imitate or reproduce in whole or in part of the content. The data herein is based on Hikrobot's internal evaluation. Actual data may vary depending on specific configuration and operating condition. The information herein is subject to change without notice All the content has been checked conscientiously. Nevertheless, Hikrobot shall not be liable to damages resulting from errors, inconsistencies or omissions.