

# MV-CH250-21GM/GC

## 25 MP CMOS GigE Area Scan Camera



GEN*i*CAM

GigE  
VISION

### Introduction

MV-CH250-21GM/GC camera adopts OnSemi PYTHON25K sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real time with max. frame rate reaching 4.64 fps.

### Key Feature

- Resolution of 5120 × 5120 and pixel size of 4.5 μm × 4.5 μm.
- Adopts GigE interface providing max. transmission distance of 100 meters without relay.
- Adopts local memory for burst transmission and retransmission.
- Compact design with mounting holes on the up and bottom panels for flexible mounting.
- Compatible with GigE Vision V2.0 Protocol, GenCam Standard, and the third-party software based on these protocol and standard.

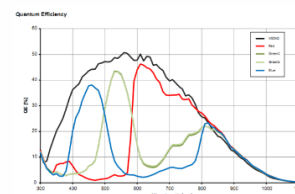
### Available Model

- M58-mount with fan, mono camera: MV-CH250-21GM-M58S-NF
- F-mount with fan, mono camera: MV-CH250-21GM-F-NF
- M58-mount with fan, color camera: MV-CH250-21GC-M58S-NF
- F-mount with fan, color camera: MV-CH250-21GC-F-NF

### Applicable Industry

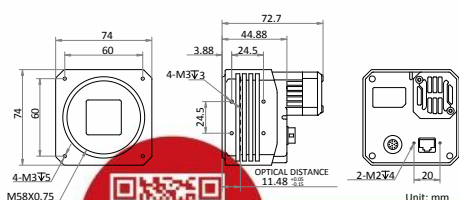
SMT/ PCB AOI, FPD, railway related applications, etc.

### Sensor Quantum Efficiency

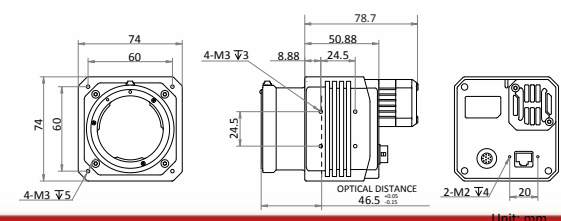


### Dimension

M58-mount with fan:



F-mount with fan:



## Specification

Model	MV-CH250-21GM	MV-CH250-21GC
<b>Camera</b>		
Sensor type	CMOS, global shutter	
Sensor model	OnSemi PYTHON25K	
Pixel size	4.5 $\mu\text{m}$ $\times$ 4.5 $\mu\text{m}$	
Sensor size	23 mm $\times$ 23 mm	
Resolution	5120 $\times$ 5120	
Max. frame rate	4.64 fps @5120 $\times$ 5120	
Dynamic range	58 dB	
SNR	41 dB	
Gain	0 dB to 15 dB	
Exposure time	80 $\mu\text{s}$ to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed
Binning	Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4	Not support
Decimation	Supports 1 $\times$ 1, 2 $\times$ 2	
Reverse image	Supports horizontal and vertical reverse image output	
<b>Electrical feature</b>		
Data interface	Gigabit Ethernet, compatible with Fast Ethernet	
Digital I/O	12-pin Hirose connector provides power and I/O, including opto-isolated input $\times$ 1 (Line 0), opto-isolated output $\times$ 1 (Line 1), bi-directional non-isolated I/O $\times$ 1 (Line 2), RS-232 $\times$ 1, and RS-485 $\times$ 1	
Power supply	12 VDC	
Power consumption	Typ. 6.7 W@12 VDC	Typ. 7.8 W@12 VDC
<b>Mechanical</b>		
Lens mount	M58-mount, optical back focal length 11.48 mm (0.45") F-mount, optical back focal length 46.5 mm (1.8")	
Dimension	M58-mount with fan: 74 mm $\times$ 74 mm $\times$ 72.7 mm (2.9" $\times$ 2.9" $\times$ 2.86") F-mount with fan: 74 mm $\times$ 74 mm $\times$ 78.7 mm (2.9" $\times$ 2.9" $\times$ 3.1")	
Weight	M58-mount with fan: < 450 g (1.0 lb.), F-mount with fan: < 600 g (1.3 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$ ) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$ )	
Humidity	20% to 95% RH, non-condensing	
<b>General</b>		
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, GenICam	
Certification	CE, RoHS, KC	

**HIKROBOT**

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.