

# MV-CH160-60GM

16 MP 1.1" CMOS GigE Area Scan Camera



GEN<i>i</i>CAM

GIGE  
VISION

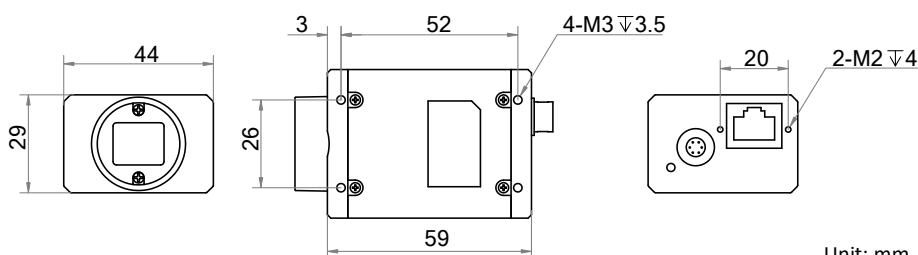
## Introduction

MV-CH160-60GM camera adopts CMOS sensor to provide high-quality images. It uses GigE interface to transmit non-compressed images in real time, and its max. frame rate can reach 7.25 fps in full resolution.

## Key Feature

- Resolution of 4000 × 4000, pixel size of 3.2 μm × 3.2 μm.
- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Easy and flexible installation, with mounting holes on both its top and bottom panels.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

## Dimension



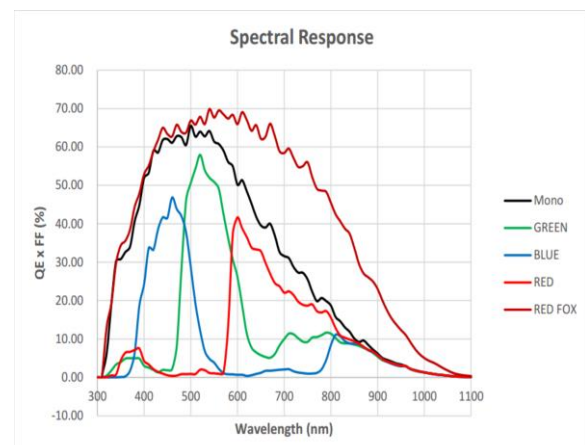
## Available Model

MV-CH160-60GM

## Applicable Industry

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

## Sensor Quantum Efficiency



## Specification

<b>Model</b>	<b>MV-CH160-60GM</b>
<b>Camera</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Sensor model</b>	HK
<b>Pixel size</b>	3.2 $\mu\text{m}$ $\times$ 3.2 $\mu\text{m}$
<b>Sensor size</b>	1.1"
<b>Resolution</b>	4000 $\times$ 4000
<b>Max. frame rate</b>	7.25 fps @ 4000 $\times$ 4000
<b>Dynamic range</b>	65 dB
<b>SNR</b>	38 dB
<b>Gain</b>	6 dB to 14 dB
<b>Exposure time</b>	12 $\mu\text{s}$ to 10 sec
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/12
<b>Binning</b>	Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4
<b>Decimation</b>	Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical feature</b>	
<b>Data interface</b>	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)
<b>Digital I/O</b>	6-pin P7 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).
<b>Power supply</b>	9 VDC to 26 VDC, supports PoE
<b>Power consumption</b>	Typ. 3.72 W @ 12 VDC
<b>Mechanical</b>	
<b>Lens mount</b>	C-mount
<b>Dimension</b>	29 mm $\times$ 44 mm $\times$ 59 mm (1.1" $\times$ 1.7" $\times$ 2.3")
<b>Weight</b>	Approx. 100 g (0.2 lb.)
<b>Ingress protection</b>	IP30 (under proper lens installation and wiring)
<b>Temperature</b>	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 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% RH to 80% RH (no condensation)
<b>General</b>	
<b>Client software</b>	MVS or third-party software meeting with GigE Vision Protocol
<b>Operating system</b>	32/64-bit Windows 7/10, 64-bit Windows 11, and 32/64-bit Linux
<b>Compatibility</b>	GigE Vision V2.0, GenICam
<b>Certification</b>	CE, RoHS, KC