

MV-CH1520-90GM

152 MP CMOS GigE Area Scan Camera



GEN*i*CAM

GigE
VISION

Introduction

MV-CH1520-90GM camera adopts Gpixel GMAX32152 sensor to provide high-quality images. It uses GigE interface to transmit images, and supports JPEG compression. With high dynamic range and SNR, it is an ideal choice for railway related applications.

Key Features

- Resolution of 16320×9200 , pixel size of $3.2 \mu\text{m} \times 3.2 \mu\text{m}$.
- Max. frame rate in non-compressed mode: 0.8 fps, max. frame rate in compressed mode of JPEG format: 5 fps.
- Adopts global shutter CMOS sensor to provide high dynamic range, SNR, and high-quality image.
- Adopts GigE interface and max. transmission distance of 100 meters.
- Compatible with GenICam Standard.
- Supports LSC to improve image quality.

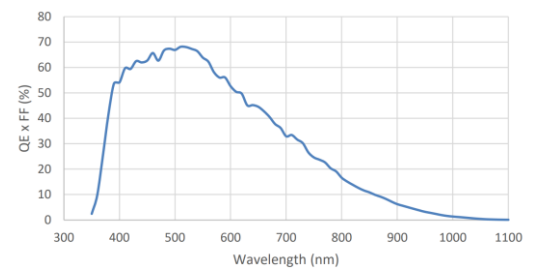
Available Model

Mono camera, without fan:
MV-CH1520-90GM-M72-NN

Applicable Industry

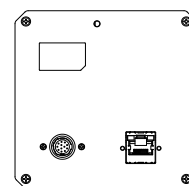
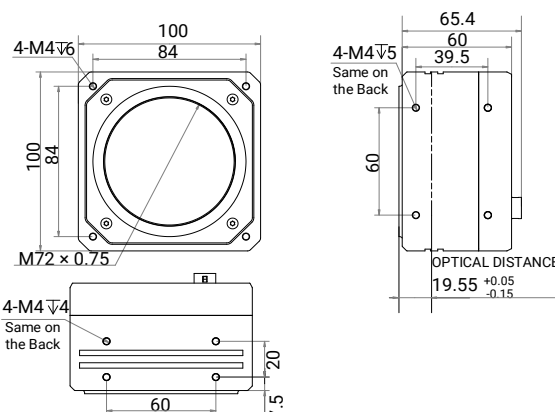
PCB AOI, FPD, railway related applications, aerial view, file scan etc.

Sensor Quantum Efficiency



MV-CH1520-90GM

Dimension



Unit: mm

Specification

Model	MV-CH1520-90GM
Performance	
Sensor type	CMOS, global shutter
Sensor model	Gpixel GMAX32152
Pixel size	3.2 μm $\times$ 3.2 μm
Sensor size	53.0 mm $\times$ 29.4 mm
Resolution	16320 $\times$ 9200
Max. frame rate	0.8 fps @ 16320 $\times$ 9200 Mono 8 (non-compressed mode) 5 fps @ 16320 $\times$ 9200 Mono 8 (compressed mode in JPEG)
Dynamic range	64.4 dB
SNR	39.1 dB
Gain	1.4x to 5.2x
Exposure time	20 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Mono
Pixel format	Mono 8/10/10Packed/12/12Packed Mono 8 (JPEG)
Binning	Supports 1 $\times$ 1, 1 $\times$ 2, 1 $\times$ 4, 2 $\times$ 1, 2 $\times$ 2, 2 $\times$ 4, 4 $\times$ 1, 4 $\times$ 2, 4 $\times$ 4
Decimation	Supports 1 $\times$ 1, 1 $\times$ 2, 1 $\times$ 4, 2 $\times$ 1, 2 $\times$ 2, 2 $\times$ 4, 4 $\times$ 1, 4 $\times$ 2, 4 $\times$ 4
Reverse image	Supports horizontal and vertical reverse image output
Electrical feature	
Data interface	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)
Digital I/O	12-pin P10 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).
Power supply	12 VDC to 24 VDC
Power consumption	Typ. 9 W @ 24 VDC
Mechanical	
Lens mount	M72*0.75, flange back length 19.55 mm
Dimension (without lens)	100 mm $\times$ 100 mm $\times$ 60 mm (3.9" $\times$ 3.9" $\times$ 2.4")
Weight	Approx. 856 g (1.9 lb.)
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)
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 (memory more than 8 GB), and 32/64-bit Linux
Compatibility	GigE Vision V2.0, GenICam
Certification	RoHS