MV-CH140-90YM/YC

14 MP CMOS CoaXPress Area Scan Camera

Introduction

MV-CH140-90YM/YC camera adopts Gsprint 5514 BSI sensor to provide high-quality image. It uses CXP-12 interface to transmit non-compressed images in real time, and its max. frame rate can reach 339 fps in full resolution.

Key Feature

- Resolution of 4608 × 3072, pixel size of 5.5 μm × 5.5 μm.
- Adopts global shutter CMOS to provide high dynamic range, SNR, and high-quality images.
- Adopts CXP-12 interface to transmit data.
- Compatible with CoaXPress Protocol and GenICam Standard.

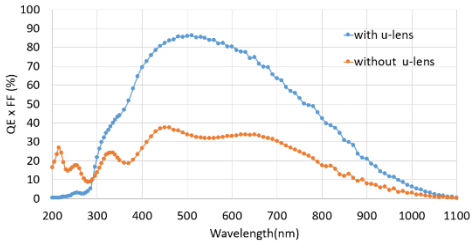
Available Model

Mono camera: MV-CH140-90YM-M58S-NF
Color camera: MV-CH140-90YC-M58S-NF

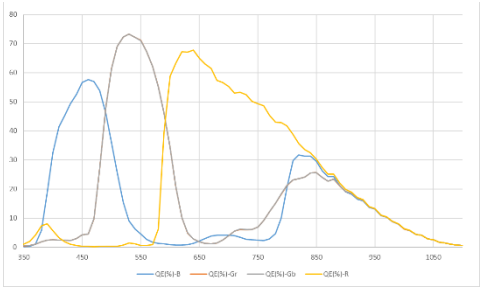
Applicable Industry

Electronics, semiconductor, PCB AOI, 3D application, motion capture, etc.

Sensor Quantum Efficiency

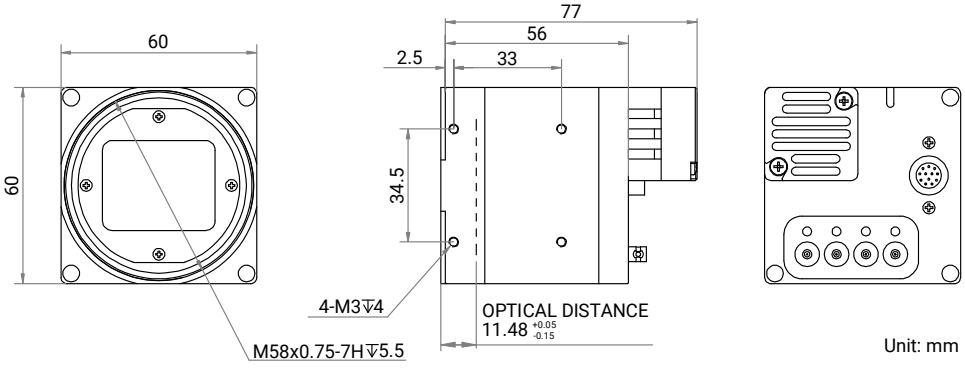


MV-CH140-90YM



MV-CH140-90YC

Dimension



Unit: mm

Specification

Model	MV-CH140-90YM	MV-CH140-90YC
Camera		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel Gsprint 5514	
Pixel size	5.5 μm × 5.5 μm	
Sensor size	25.34 mm × 16.9 mm	
Resolution	4608 × 3072	
Max. frame rate	339 fps @ 4608 × 3072 Mono 8	339 fps @ 4608 × 3072 Bayer GR 8
Dynamic range	75 dB	
SNR	44.7 dB	
Gain	Supports 1.0 ×, 1.6 ×, 2.3 ×, 2.9 ×, 5.0 ×	
Exposure time	2 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/12	Bayer GR 8/10/12
Binning	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Decimation	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	CoaXPress with Micro-BNC interface	
Digital I/O	12-pin P10 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), and RS-232 × 1.	
Power supply	12 VDC to 24 VDC, CXP-0 and CXP-1 connectors support PoCXP	
Power consumption	Typ. 15.1 W @ 24 VDC	
Mechanical		
Lens mount	M58 × 0.75, flange back length 11.48 mm	
Dimension	60 mm × 60 mm × 77 mm (2.4" × 2.4" × 3.0") (without lens mount)	
Weight	Approx. 790 g (1.7 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °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 frame grabber software meeting with CoaXPress Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux	
Compatibility	CoaXPress, GenICam	
Certification	CE, RoHS, KC	