MV-CH250-90UM/UC

25 MP 1.1" CMOS USB3.0 Area Scan Camera
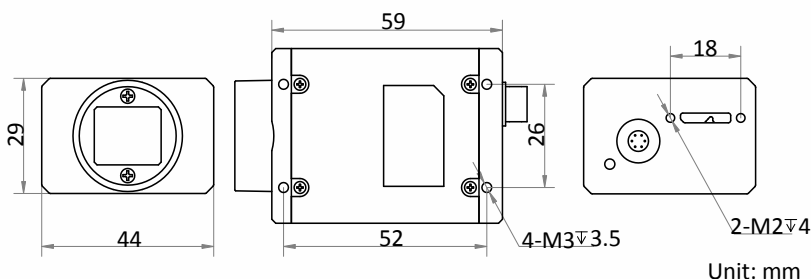
GEN<i>CAM

US3 VISION™

Introduction

MV-CH250-90UM/UC camera adopts Gpixel GMAX0505 sensor to provide high-quality images. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 14.3 fps in full resolution.

Key Feature

- Resolution of 5120 × 5120, pixel size of 2.5 μm × 2.5 μm.
- Supports LSC correction, binning, image reverse, etc.
- Supports hardware trigger, software trigger, and free run.
- Compatible with USB3 Vision Protocol, GenlCam Standard, and the third-party software based on the protocol and standard.
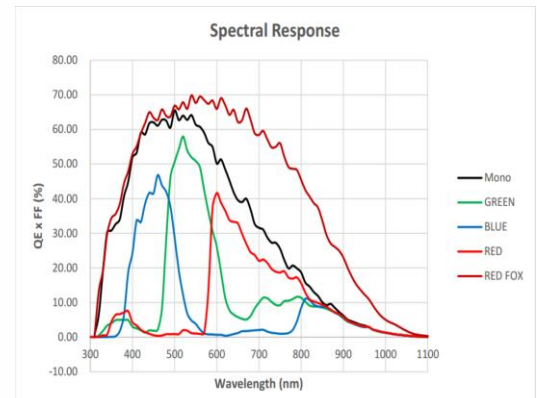
Dimension

Unit: mm

Available Model

- Mono camera: MV-CH250-90UM
- Color camera: MV-CH250-90UC

Applicable Industry

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

Sensor Quantum Efficiency

Specification

Model	MV-CH250-90UM	MV-CH250-90UC
Camera		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX0505	
Pixel size	2.5 μm × 2.5 μm	
Sensor size	1.1"	
Resolution	5120 × 5120	
Max. frame rate	14.3 fps @5120 × 5120	
Dynamic range	65 dB	
SNR	36 dB	
Gain	Supports 2.0 ×, 2.5 ×, 3.0 ×, 3.5 ×, 4.0 ×, 4.5 ×, 5.0 ×	
Exposure time	12 μs 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 BG 8/10/10p/12/12p, 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 feature		
Data interface	USB3.0, compatible with USB2.0	
Digital I/O	6-pin Hirose 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 USB3.0 power supply	
Power consumption	Typ. 3.4 W@5 VDC (USB3.0 provides power supply)	Typ. 4.0 W@5 VDC (USB3.0 provides power supply)
Mechanical		
Lens mount	C-mount	
Dimension	29 mm × 44 mm × 59 mm (1.1" × 1.7" × 2.3")	
Weight	Approx. 100 g (0.2 lb.)	
Ingress protection	IP30 (under proper lens installation and wiring)	
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)	
Humidity	20% to 95% RH, non-condensing	
General		
Client software	MVS or third-party software meeting with USB3 Vision Protocol	
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS	
Compatibility	USB3 Vision, GenICam	
Certification	CE, FCC, RoHS, KC	

HIKROBOT

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