

MV-CH650-60TM/TC

65 MP CMOS 10 GigE Area Scan Camera



GEN*i*CAM

10GigE
VISION

Introduction

MV-CH650-60TM/TC camera adopts stacked BSI sensor to provide high-quality image. It uses 10 GigE interface to transmit non-compressed image in real time, and its max. frame rate can reach 17.5 fps in full resolution.

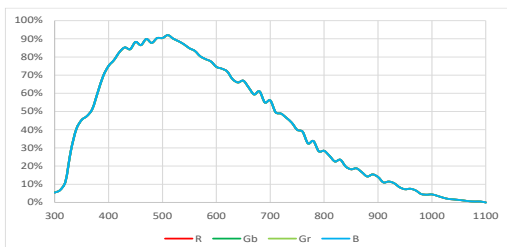
Available Model

- Mono camera: MV-CH650-60TM-M58S-NN
- Color camera: MV-CH650-60TC-M58S-NN

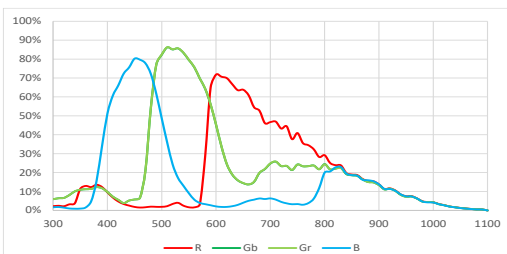
Applicable Industry

PCB AOI, FPD, railway-related applications, PV, etc.

Sensor Quantum Efficiency



MV-CH650-60TM

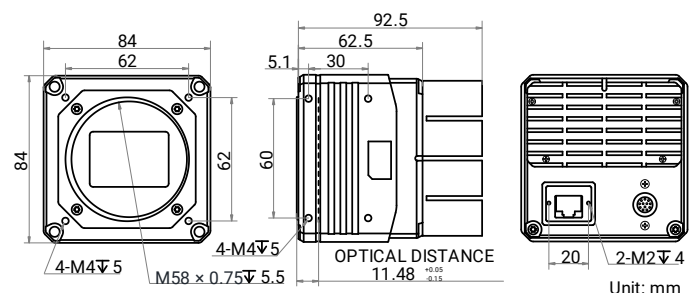


MV-CH650-60TC

Key Features

- Resolution of 9344 × 7008, and pixel size of 3.2 μm × 3.2 μm.
- Supports auto or manual adjustment of exposure time and white balance, and manual adjustment of gain, LUT, Gamma correction, etc.
- Adopts 10 GigE interface providing max. transmission distance of 100 meters without relay.
- Compact design with mounting holes on panels for flexible mounting.
- Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on protocols.

Dimension



Specification

Model	MV-CH650-60TM	MV-CH650-60TC
Performance		
Sensor type	CMOS, rolling shutter	
Sensor model	Stacked BSI	
Pixel size	3.2 μm × 3.2 μm	
Sensor size	30 mm × 22.4 mm	
Resolution	9344 × 7008	
Max. frame rate	17.5 fps @ 9344 × 7008 Mono 8	17.5 fps @ 9344 × 7008 Bayer BG 8
Dynamic range	69.1 dB	
SNR	43 dB	
Gain	0 dB to 24 dB	
Exposure time	58 μs to 9.9 sec	
Exposure mode	Off/Once/Continuous exposure mode, supports Rolling Shutter	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8/10/12 Bayer BG 8/10/10Packed/12/12Packed YUV422Packed, YUV422_YUYV_Packed RGB 8, BGR 8
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 feature		
Data interface	10 Gigabit Ethernet (10000 Mbit/s), compatible with Gigabit Ethernet (1000 Mbit/s)	
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	9 VDC to 24 VDC	
Power consumption	Typ. 13.3 W @ 12 VDC	Typ. 15.6 W @ 12 VDC
Mechanical		
Lens mount	M58*0.75, flange back length 11.48 mm	
Dimension	84 mm × 84 mm × 92.5 mm (3.3" × 3.3" × 3.6")	
Weight	Approx. 600 g (1.3 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 third-party software meeting with GigE Vision Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	