

MV-CH1510-10FM/FC

151 MP CMOS 10 GigE Area Scan Camera



GEN*i*CAM

10GiGE
VISION

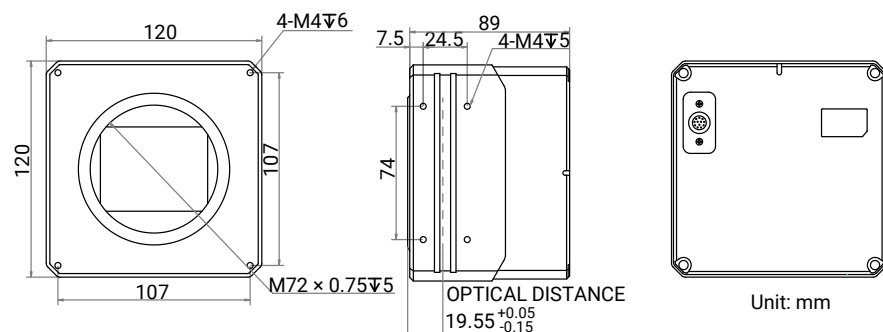
Introduction

MV-CH1510-10FM/FC camera adopts Sony® IMX411 sensor to provide high-quality images. It uses 10 GigE interface to transmit non-compressed data in real time, and its max. frame rate can reach 6.2 fps in full resolution.

Key Feature

- Supports Binning, LSC Sequencer, FFC and other ISP functions.
- Adopts 10GigE over Fiber interface to transmit data, and max. transmission distance reaches 300 m.
- Adopts TEC technology to reduce sensor temperature and ensure high-quality images under long-time exposure condition.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

Dimension



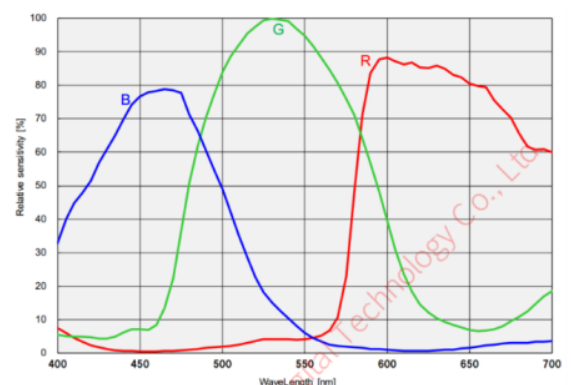
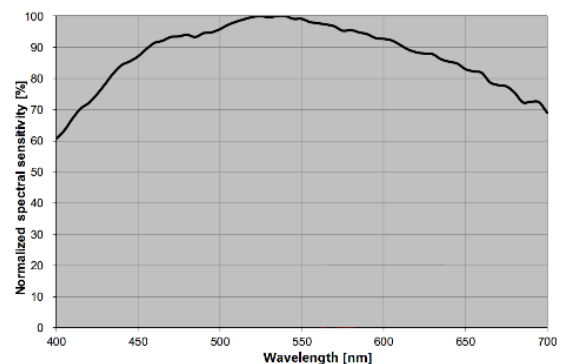
Available Model

- Mono camera: MV-CH1510-10FM-M72-TF
- Color camera: MV-CH1510-10FC-M72-TF

Applicable Industry

PCB AOI, FPD, astronomy surveying and mapping, railway related application, etc.

Sensor Quantum Efficiency



Specification

Model	MV-CH1510-10FM	MV-CH1510-10FC
Performance		
Sensor type	CMOS, rolling shutter	
Sensor model	Sony® IMX411	
Pixel size	3.76 μm × 3.76 μm	
Sensor size	66.7 mm	
Resolution	14208 × 10640	
Max. frame rate	6.2 fps @ 14208 × 10640 Mono 8	6.2 fps @ 14208 × 10640 Bayer RG 8
Dynamic range	78.8 dB	
SNR	45 dB	
Gain	0 dB to 36 dB	
Exposure time	30 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode, supports Rolling mode	
Mono/Color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed/16	Mono 8/10/12/16, Bayer RG 8/10/10Packed/12/12Packed/16, 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 reverse image output	
Electrical feature		
Data interface	10 Gigabit Ethernet (10000 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), RS-232 × 1	
Power supply	24 VDC	
Power consumption	Typ. 11.28 W @ 24 VDC (non-TEC mode) Typ. 48.96 W @ 24 VDC (TEC mode)	Typ. 13.2 W @ 24 VDC (non-TEC mode) Typ. 51.22 W @ 24 VDC (TEC mode)
Mechanical		
Lens mount	M72*0.75, flange back length 19.55 mm	
Dimension	120 mm × 120 mm × 89 mm (4.7" × 4.7" × 3.5")	
Weight	Approx. 2.5 kg (5.5 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 70 °C (-22 °F to 158 °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 and 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	