

MV-CT3M/CA0120/G/C/NN

12 MP CMOS XoCLink Area Scan Camera



GEN< i >CAM

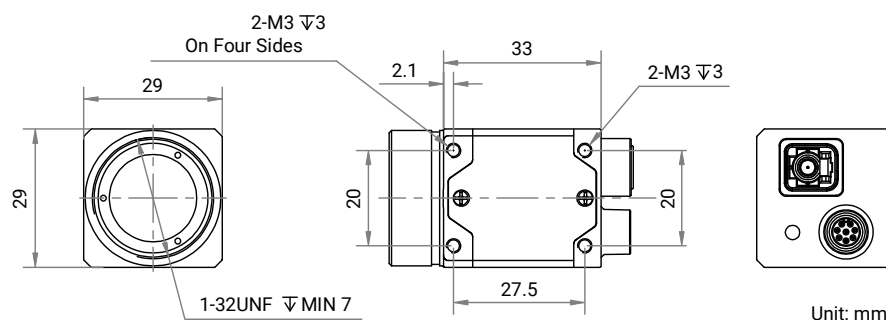
Introduction

MV-CT3M/CA0120/G/C/NN camera adopts stacked BSI CMOS sensor to provide high-quality images with low noise and high resolution. It uses XoCLink interface to transmit non-compressed images in real time, and its max. frame rate can reach 36.6 fps.

Key Features

- Adopts compact and lightweight design with flexible mounting options, applicable to high-speed motion scenes.
- Low power consumption design reduces heat flux density, resulting in low temperature drift.
- Single-cable PoC enables power supply, control, and data transmission, with a transmission distance of up to 15 meters.
- Isolated ground design ensures enhanced immunity to interference.

Dimension



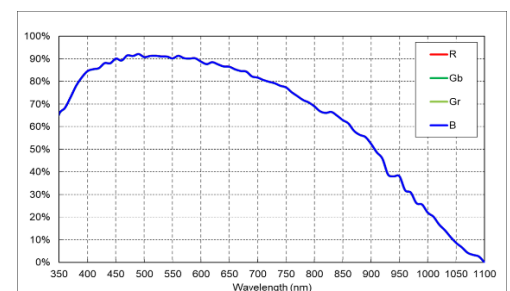
Available Model

- Mono camera:
MV-CT3MA0120/G/C/NN
- Color camera:
MV-CT3CA0120/G/C/NN

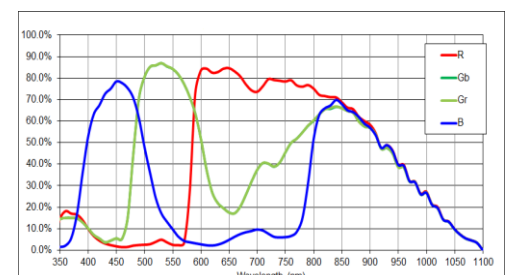
Applicable Industry

SMT/PCB AOI, FPD detection, photovoltaic application, etc.

Sensor Quantum Efficiency



MV-CT3MA0120/G/C/NN



MV-CT3CA0120/G/C/NN

Model	MV-CT3MA0120/G/C/NN	MV-CT3CA0120/G/C/NN
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	1.1"	
Resolution	4096 × 3000	
Max. frame rate	36.6 fps @ 4096 × 3000 Mono 8	36.6 fps @ 4096 × 3000 Bayer GB 8
Dynamic range	61.2 dB	
SNR	44.1 dB	
Gain	0 dB to 24 dB	
Exposure time	20 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/12	Mono 8 Bayer GB 8/10/12 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	XoCLink	
Digital I/O	8-pin M8 A-Code aviation 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 × 2 (Line 2/5).	
Power supply	9 VDC to 24 VDC, supports PoC	
Power consumption	Typ. 1.9 W @ 12 VDC	Typ. 2 W @ 12 VDC
Mechanical		
Lens mount	C-mount	
Dimension (without lens)	29 mm × 29 mm × 33 mm (1.1" × 1.1" × 1.3")	
Weight	Approx. 90 g (0.2 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: −30 °C to 60 °C (−22 °F to 140 °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	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11	
Compatibility	GenICam, XoCLink	