# MV-CT3M/CA0120/G/C/NN

## 12 MP CMOS XoCLink Area Scan Camera




GEN<i>CAM

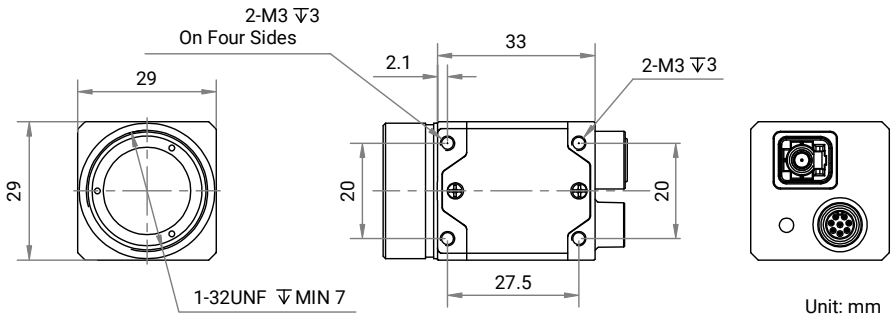
## Introduction

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.

## Dimension



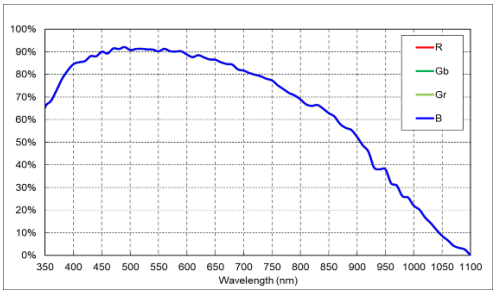

## Available Model

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

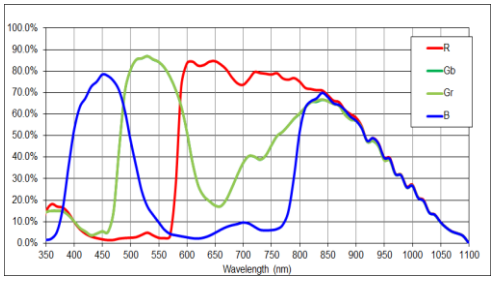
## Applicable Industry

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

## Sensor Quantum Efficiency




MV-CT3MA0120/G/C/NN




MV-CT3CA0120/G/C/NN

# Specification

| 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<br>Bayer GB 8/10/12<br>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)<br>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 | |

Hangzhou Hikrobot Co. Ltd.
en.hikrobotics.com

© Hangzhou Hikrobot Co., Ltd. All Rights Reserved.
Hangzhou Hikrobot does not tolerate any infringement. Any organization or individual may not imitate or reproduce in whole or in part of the content. The data herein is based on Hikrobot's internal evaluation. Actual data may vary depending on specific configuration and operating condition. The information herein is subject to change without notice All the content has been checked conscientiously. Nevertheless, Hikrobot shall not be liable to damages resulting from errors, inconsistencies or omissions.