

MV-CT*M/CU0020/G

2 MP USB 3.0 Area Scan Camera



GEN*i*CAM

USBTM
VISION

Introduction

Designed for industrial applications, MV-CT*M/CU0020/G camera offers industry-leading performance and reliability, with various versions to meet diverse application needs. It supports IP67 protection, expanded interfaces, and integration of liquid/electric lenses, light sources, and lens cap, creating a more flexible and efficient system.

Key Feature

- The devices with PRO version and MAX version support waterproof connector.
- The devices with PRO version and MAX version adopt precision temperature control design for fast heat balance.
- The color devices with PRO version and MAX version support auto color correction based on multi-spectral fusion technology.
- The device with MAX version integrates lens and light source, enabling lens focusing and light source control.
- Adopts Type-C interface and supports higher transmission bandwidth.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

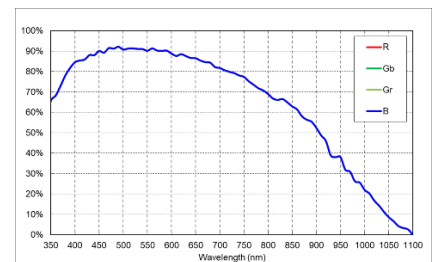
Applicable Industry

Electronic semiconductor, factory automation, food and beverage, medicine packaging, etc.

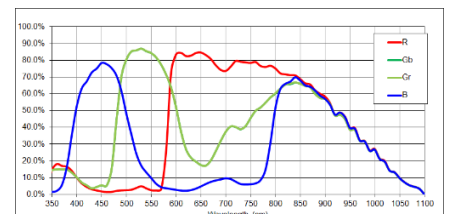
Available Model

- Mono camera (BASE):
MV-CT0MU0020/G/NN/NN
- Color camera (BASE):
MV-CT0CU0020/G/NN/NN

Sensor Quantum Efficiency



MV-CT*MU0020/G



MV-CT*CU0020/G

Specification

| Model | MV-CT*MU0020/G | MV-CT*CU0020/G |
|----------------------------|--|---|
| Performance | | |
| Sensor type | CMOS, global shutter | |
| Sensor model | Stacked BSI | |
| Pixel size | 3.45 μm \times 3.45 μm | |
| Sensor size | 1/2.53" | |
| Resolution | 1624 \times 1240 | |
| Max. frame rate | 180.1 fps @ 1624 \times 1240 Mono 8 | 180.1 fps @ 1624 \times 1240 Bayer GB 8 |
| Dynamic range | 68.5 dB | |
| SNR | 44 dB | |
| Gain | 0 dB to 24 dB | |
| Exposure time | 23 μs to 10 sec | |
| Exposure mode | Off/Once/Continuous exposure mode, supports Trigger Width and Trigger Controlled | |
| Mono/color | Mono | Color |
| Pixel format | Mono 8/10/10Packed/12/12Packed | Mono 8, Bayer GB 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8 |
| Binning | Supports 1 \times 1, 2 \times 2, 4 \times 4 | |
| Decimation | Supports 1 \times 1, 2 \times 2, 4 \times 4 | |
| Reverse image | Supports horizontal and vertical reverse image output | |
| Electrical features | | |
| Data interface | USB 3.0, compatible with USB 2.0 | |
| Data interface type | Type-C interface | |
| Control interface | BASE: Not supported | |
| Digital I/O | 8-pin M8 A-Code aviation connector provides power and I/O, including opto-isolated input \times 1 (Line 0), opto-isolated output \times 1 (Line 1), bi-directional non-isolated I/O \times 1 (Line 2). | |
| Power supply | 9 VDC to 24 VDC, supports USB power supply | |
| Power consumption | BASE: Typ. 1.5 W @ 5 VDC (USB 3.0 provides power supply) | BASE: Typ. 1.6 W @ 5 VDC (USB 3.0 provides power supply) |

| Mechanical | |
|---------------------------|--|
| Lens mount | C-mount |
| Dimension | BASE: 29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2") |
| Weight | BASE: Approx. 72 g (0.2 lb.) |
| Ingress protection | BASE: 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 or third-party software meeting with USB3 Vision Protocol |
| Operating system | 32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux |
| Compatibility | USB3 Vision, GenICam |
| Certification | CE, RoHS, KC |

Dimension

BASE

