

CHUM-131M/C-C

1.3 MP 1/2" CMOS USB3.0 Board Level Camera

Introduction

CHUM-131M/C-C camera adopts Onsemi PYTHON1300 chip and has high frame rate. It adopts C-mount and is small in size which can meet different spatial requirements.

Key Feature

- Single board design for flexible installation
- Supports auto and manual adjustment for gain, exposure control, white balance, LUT, Gamma correction, and etc
- Adopts image interpolation algorithm for color camera to have better color correction
- Power supply and data transmission via USB3.0 interface
- Compatible with USB3 Vision Protocol, GenlCam standard, and the third-party software based on these protocol and standard.

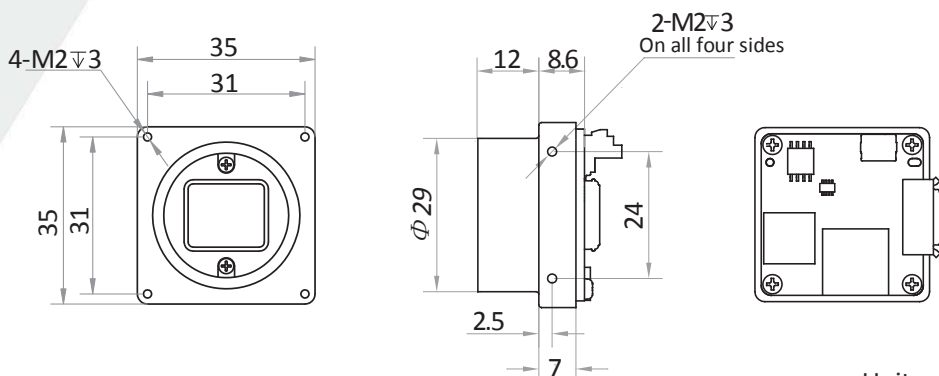
Applicable Industry

Electronic semiconductor, factory automation, logistics, liquor and beverage, medicine packing and etc.

Available Model

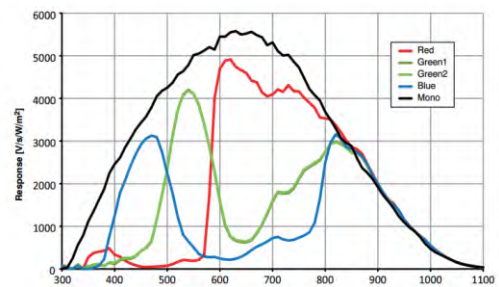
- Mono camera: CHUM-131M-C
- Color camera: CHUM-131C-C

Dimension



GEN*i*CAM USB VISION

Sensor Quantum Efficiency



CHUM-131M/C-C

Unit:mm

Specification

| Model | CHUM-131M-C | CHUM-131C-C |
|----------------------------|---|---|
| Parameters | 1.3 MP 1/2" CMOS USB3.0 Board Level Camera | |
| Camera | | |
| Sensor type | CMOS, global shutter | |
| Sensor model | Onsemi PYTHON1300 | |
| Pixel size | 4.8 μm × 4.8 μm | |
| Sensor size | 1/2" | |
| Resolution | 1280 × 1024 | |
| Frame rate | 170 fps | |
| Dynamic range | 60 dB | |
| SNR | 40 dB | |
| Gain | 0 dB to 15 dB | |
| Exposure time | 40 μs to 10 s | 65 μs to 10 s |
| Shutter mode | Off/ Once/ Continuous exposure mode | |
| Mono/color | Mono | Color |
| Pixel format | Mono 8/10/10p/12/12p | Mono8/10/12, Bayer RG 8/10/10p/12/12p YUV 422 Packed, YUV422_YUYV_Packed, RGB8 |
| Acquisition mode | Continuous mode, single frame mode | |
| Binning | 1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4 | Not support |
| Decimation | Not support | |
| Reverse image | Supports horizontal and vertical reverse image output | |
| Electrical features | | |
| Data interface | USB3.0 | |
| Digital I/O | Bi-directional non-isolated I/O x 2 (Line 1, Line 2) | |
| Power supply | USB3.0 power supply | |
| Power consumption | < 2.28 W@5 VDC | |
| Structure | | |
| Lens mount | C-Mount | |
| Dimension | 35 mm × 35 mm × 8.6 mm (1.4" × 1.4" × 0.3") | |
| Weight | Approx. 30 g (0.07 lb.) | |
| 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% to 80% RH, without condensation | |
| General | | |
| Client software | MVS or third-party software with USB3 Vision Protocol | |
| Operating system | Windows XP/7/10 32/64bits, Linux 32/64bits or MacOS 64bits | |
| Compatibility | USB3 Vision, GenICam | |
| Certification | CE, FCC, RoHS | |