

Mako G

G-234



- Sony IMX249 CMOS sensor
- Ultra-compact design
- 10-bit or 12-bit sensor readout
- Power over Ethernet

基本描述

2.35 Megapixel machine vision camera with Sony IMX CMOS sensor

Mako G-234 is a 2.35 megapixel GigE machine vision camera that incorporates the high quality Type 1/1.2 (13.4 mm diagonal) Sony IMX249 CMOS sensor. At full resolution, this camera runs 41.2 frames per second (10-bit sensor readout). With a smaller region of interest, higher frame rates are possible. The Mako G-234 is an ideal replacement for legacy CCD models.

Mako G cameras have the same ultra-compact form factor and the same mounting positions as many analog cameras. All models include Power over Ethernet (PoE), three opto-isolated outputs, and a 64 MByte image buffer. The image quality profits from the precisely aligned sensor. By default monochrome models ship with no optical filter and color models ship with IRC Hoya C-5000 IR cut filter.

Benefits and features:

- Monochrome (G-234B) and color (G-234C) models
- GigE Vision interface with Power over Ethernet
- Screw mount RJ45 Ethernet connector for secure operation in industrial environments
- Supports cable lengths up to 100 meters (CAT-5e or CAT-6)
- Comprehensive I/O functionality for simplified system integration
- Easy camera mounting via standard M3 threads on top and bottom of housing or optional tripod adapter



- Support for popular third party image-processing libraries including Cognex VisionPro, MathWorks MATLAB, National Instruments LabVIEW, Stemmer Imaging Common Vision Blox, MVTec HALCON and MERLIC

Options:

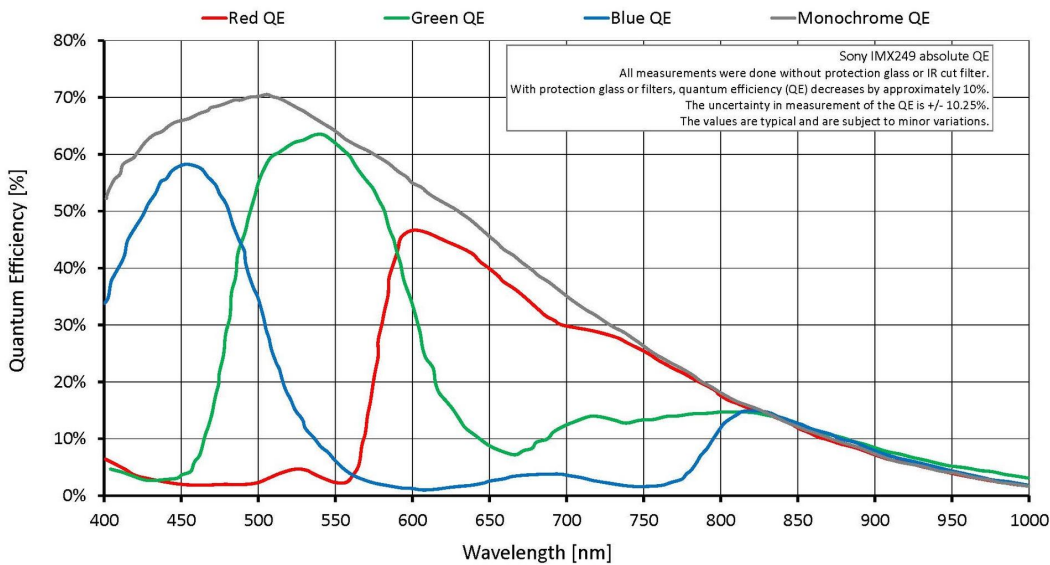
- Available with CS-Mount or CS-Mount with M12-Mount adapter
- Available with Protection glass B 270 (ASG), IRC type Jenofilt 217 (IR cut filter), IRC Hoya C-5000 (IR cut filter), IRP RG715 (IR pass filter), IRP RG830 (IR pass filter)

See the [Modular Concept](#) for lens mount, optical filter, and housing design options.
See the [Customization and OEM Solutions](#) page for additional options.

性能参数

| | |
|----------------|---|
| Mako G | G-234 |
| 接口 | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
| 分辨率 | 1936 (H) × 1216 (V) |
| 传感器 | Sony IMX249 |
| 传感器类型 | CMOS |
| 传感器尺寸 | Type 1/1.2 |
| 像元尺寸 | 5.86 μm × 5.86 μm |
| 标准镜头接口 | C-Mount |
| 最大满帧帧率 | 41.2 fps |
| ADC | 12 bit |
| 缓存 (RAM) | 64 MByte |
| 非易失性内存 (Flash) | 1024 KByte (for selected models only) |
| 输出 | |
| Bit位数 | 10/12 bit |
| 黑白像素格式 | Mono8, Mono12, Mono12Packed |
| YUV彩色像素格式 | YUV411Packed, YUV422Packed, YUV444Packed |
| RGB彩色像素格式 | RGB8Packed, BGR8Packed |
| 原始像素格式 | BayerRG8, BayerRG12, BayerRG12Packed |
| 通用输入输出(GPIOs) | |
| 光耦 I/Os | 1 input, 3 outputs |
| 工作条件/尺寸 | |
| 工作温度 | +5 °C to +45 °C housing temperature |
| 电源要求 (DC) | 12 to 24 VDC; PoE |
| 功耗 | 2.4 W at 12 VDC; 2.8 W PoE |
| 重量 | 80 g |

| | |
|---------------------|---|
| Mako G | G-234 |
| 尺寸(L × W × H in mm) | 60.5 × 29.2 × 29.2 (including connectors) |
| 符合规范 | CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B; CAN ICES-003 |



特性

Image optimization features:

- Auto gain (manual gain control: 0 to 40 dB; 0.1 dB increments)
- Auto exposure (exposure time control varies by pixel format)
- Auto white balance (G-234C only)
- Binning
- Color correction, hue, saturation (G-234C only)
- Decimation
- Gamma correction
- One look-up table (LUT)
- Region of interest (ROI), separate ROI for auto features
- Reverse X/Y

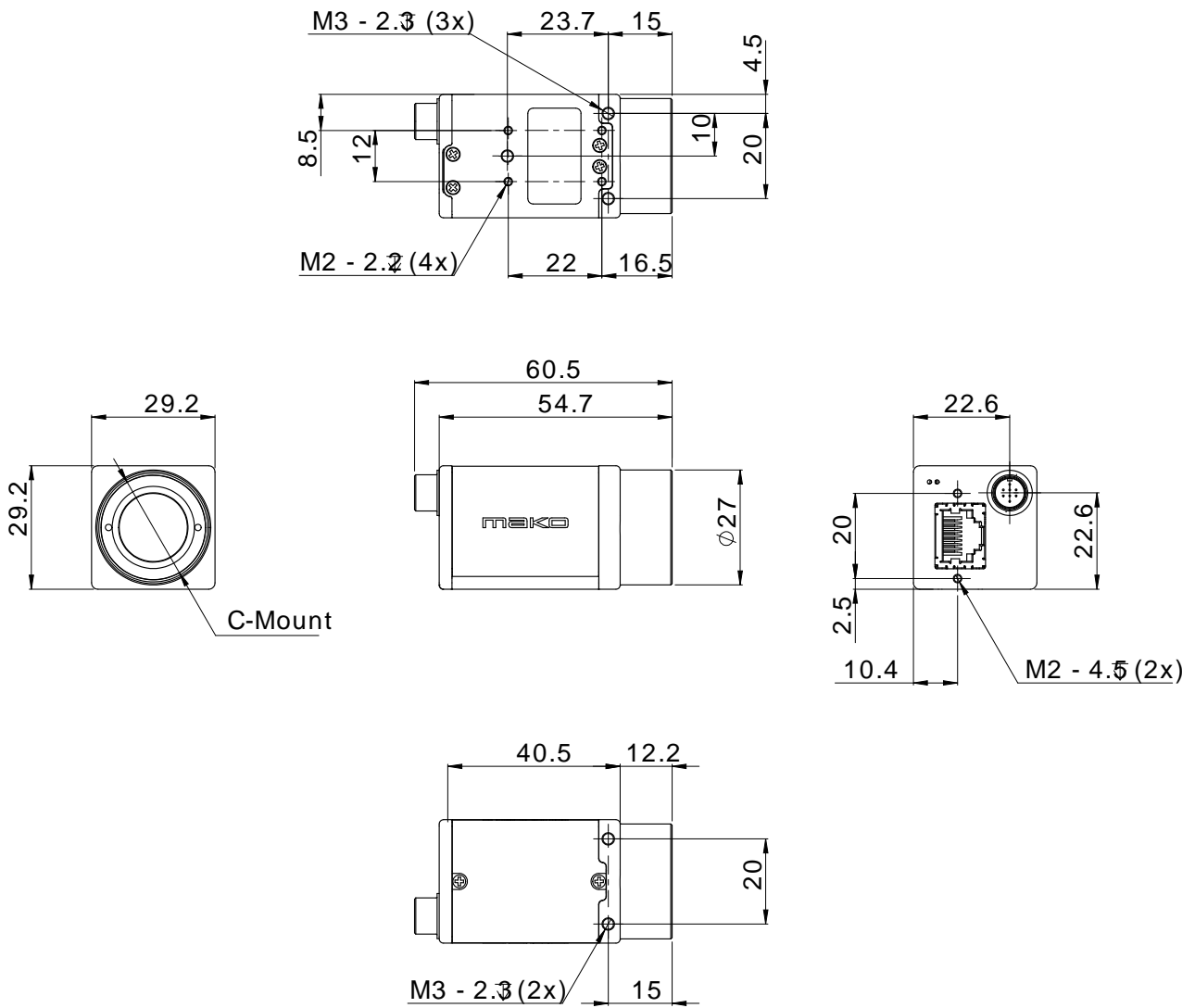
Camera control features:

- 10-bit or 12-bit sensor readout mode



- Event channel
- Image chunk data
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring (main board only)
- Non-volatile memory 1024 KByte (for selected models only)

外形尺寸





应用场景

Mako G-234 is ideal for a wide range of applications including:

- Robotics
- Quality control
- Inspection, surveillance
- Industrial imaging
- Machine vision
- Logistics