

# Mako G

## G-223



- Ultra-compact
- Affordable
- Power over Ethernet
- CMOSIS/ams CMV2000 CMOS sensor

## 基本描述

GigE Vision camera, CMOSIS/ams CMV2000 CMOS sensor, 49.5 fps

Mako G-223 is a 2.2 megapixel GigE machine vision camera that incorporates the high quality Type 2/3 (12.7 mm diagonal) CMOSIS/ams CMV2000 CMOS sensor. At full resolution, this camera runs 49.5 frames per second. With a smaller region of interest, higher frame rates are possible. 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 MB 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-223B) and color (G-223C) 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
- Popular C-Mount lens mount
- Easy camera mounting via standard M3 threads on top and bottom of housing or optional tripod adapter
- Easy software integration with Allied Vision's [Vimba SDK](#) and compatibility to the most popular [third party image-processing libraries](#).

Options:

- Available with CS-Mount or M12-Mount adapter

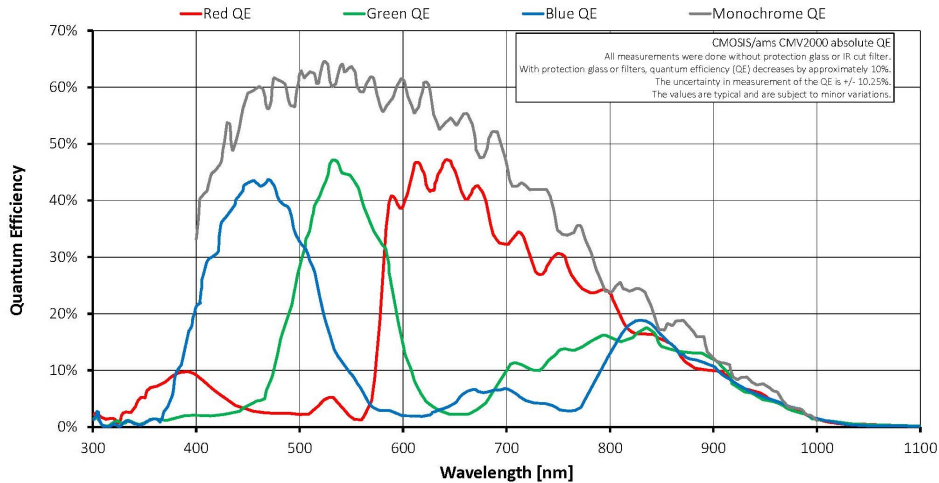
- Available with Protection glass B 270 (ASG), IRC type Jenofilt 217 (IR cut filter), IRC Hoya C-5000 (IR cut filter), IRP RG715 (IR pass filter), IRP RG830 (IR pass filter)

See the Modular Concept for lens mount and optical filter options.

See the Customization and OEM Solutions webpage for additional options.

## 性能参数

Mako G	G-223
接口	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
分辨率	2048 (H) × 1088 (V)
传感器	CMOSIS/ams CMV2000
传感器类型	CMOS
传感器尺寸	Type 2/3
像元尺寸	5.5 μm × 5.5 μm
标准镜头接口	C-Mount
最大满帧帧率	49.5 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	8/12 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	BayerGB8, BayerGB12, BayerGB12Packed
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
尺寸(L × W × H in mm)	60.5 × 29.2 × 29.2 (incl. 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 26 dB; 1 dB increments)
- Auto exposure (manual exposure control: 30  $\mu$ s to 153 s; 1  $\mu$ s increments)
- Auto white balance (G-223C only)
- Color correction, hue, saturation (G-223C only)
- Column defect masking
- Gamma correction
- One look-up table (LUT)
- Piecewise Linear HDR mode
- Region of interest (ROI), separate ROI for auto features

### Camera control features:

- 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-223 is ideal for a wide range of applications including:

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