

# Mako G G-223B NIR



- Ultra-compact design
- Affordable
- Power over Ethernet
- CMOSIS/ams CMV2000 NIR enhanced sensor

## 基本描述

### CMOSIS/ams CMV2000 CMOS sensor, NIR optimized, global shutter

Mako G-223B NIR is a GigE machine vision camera that incorporates the high quality Type 2/3 (12.7 mm diagonal) CMOSIS/ams CMV2000 CMOS NIR enhanced 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 MByte image buffer. The image quality profits from the precisely aligned sensor. By default NIR models ship with no optical filter.

### Options:

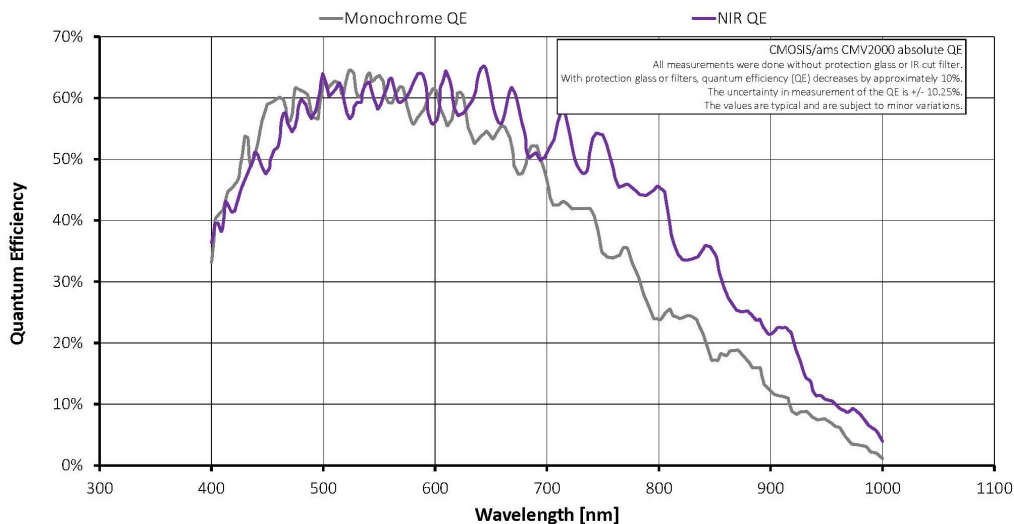
- Various optical filter and lens mount options
- White medical housing

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

## 性能参数

Mako G	G-223B NIR
接口	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
分辨率	2048 (H) × 1088 (V)
传感器	CMOSIS/ams CMV2000 NIR
传感器类型	CMOS
传感器尺寸	Type 2/3

Mako G	G-223B NIR
像元尺寸	5.5 $\mu\text{m}$ $\times$ 5.5 $\mu\text{m}$
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)
<b>输出</b>	
Bit位数	8/12 bit
黑白像素格式	Mono8, Mono12, Mono12Packed
<b>通用输入输出(GPIOs)</b>	
光耦 I/Os	1 input, 3 outputs
<b>工作条件/尺寸</b>	
工作温度	+5 $^{\circ}\text{C}$ to +45 $^{\circ}\text{C}$ 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 $\times$ W $\times$ H in mm)	60.5 $\times$ 29.2 $\times$ 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

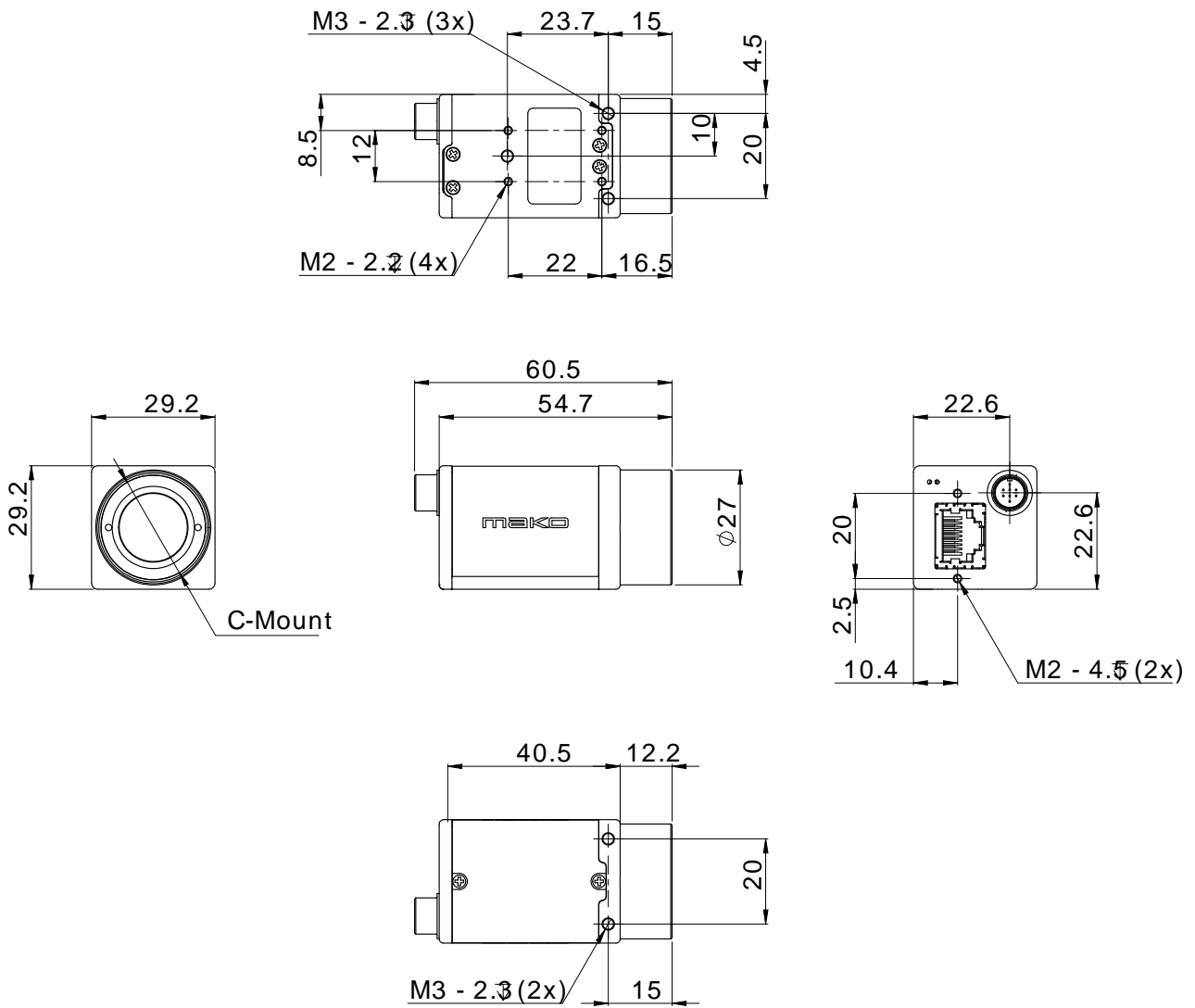
### Image optimization features:

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

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