

# Manta

## G-223



- CMOSIS/ams CMOS sensor
- PoE optional
- Angled-head and board level variants
- Video-iris lens control

## 基本描述

### GigE camera with CMOSIS/ams CMV2000 CMOS sensor

Manta G-223 is a machine vision camera that incorporates the high quality Type 2/3 (12.7 mm diagonal) CMOSIS/ams CMV2000 sensor. At full resolution, this camera runs 53.7 frames per second. With a smaller region of interest, higher frame rates are possible. Manta G-223 is offered in both monochrome and color models.

Manta is one of Allied Vision's versatile GigE Vision cameras with a wide range of features. Particular highlights are the three look-up tables, sophisticated color correction capabilities, a robust metal housing, and many modular options. By default monochrome models ship with protection glass B 270 (ASG) and color models ship with an IRC Hoya C-5000 IR cut filter. A 2/3 inch lens may cause vignetting (1 inch lens recommended).

### Benefits and features:

- Monochrome (G-223B) and color (G-223C) models
- GigE Vision interface with Power over Ethernet option
- Screw mount RJ45 Ethernet connector for secure operation in industrial environments
- Supports cable lengths up to 100 meters (CAT-5e or CAT-6)
- Trigger over Ethernet (ToE) Action Commands allow for a single cable solution to reduce system costs
- Easy camera mounting via standard M3 threads on top and bottom of housing or optional tripod adapter
- Comprehensive I/O functionality for simplified system integration
- Popular C-Mount lens mount
- Easy software integration with Allied Vision's [Vimba SDK](#) and compatibility to the most popular [third party image-processing libraries](#).

## Options:

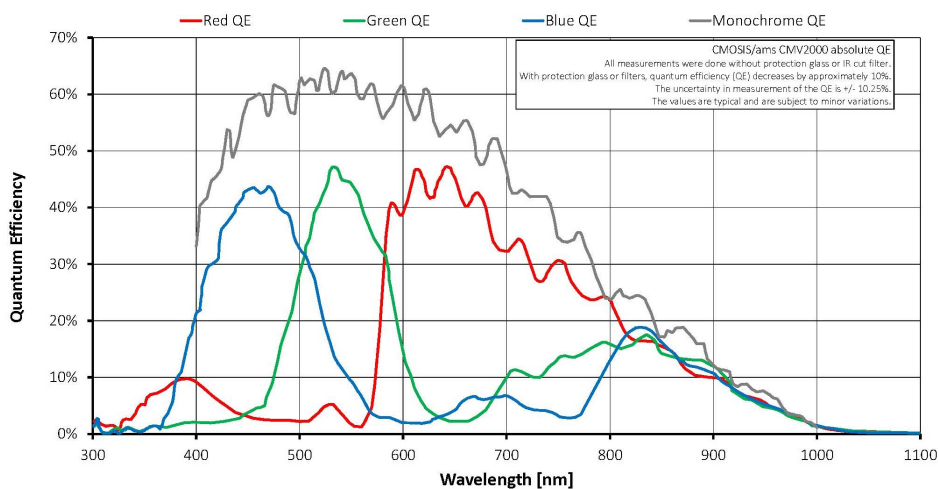
- Available with Power over Ethernet (PoE) compliant interface
- Available with CS-Mount or M12-Mount adapter
- Available with Protection glass B 270 (ASG), IRC type Jenofilt 217 (IR cut filter), IRC Hoya C-5000 (IR cut filter), IRP RG715 (IR pass filter), IRP RG830 (IR pass filter)
- Available with various angled-head housings or board level version
- Available with white medical design

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

## 性能参数

Manta	G-223
接口	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
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	53.7 fps
ADC	12 bit
缓存 (RAM)	128 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, Mono12Packed, Mono12
YUV彩色像素格式	YUV411Packed, YUV422Packed, YUV444Packed
RGB彩色像素格式	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
原始像素格式	BayerGB8, BayerGB12, BayerGB12Packed
	通用输入输出(GPIOs)
光耦 I/Os	2 inputs, 2 outputs
RS232	1
	工作条件/尺寸
工作温度	+5 °C to +45 °C ambient (without condensation)
电源要求 (DC)	8 to 30 VDC; PoE

Manta	G-223
功耗	2.7 W at 12 VDC; 3.1 W PoE
重量	190 g; 200 g (PoE)
尺寸(L × W × H in mm)	86.4 × 44 × 29 (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:

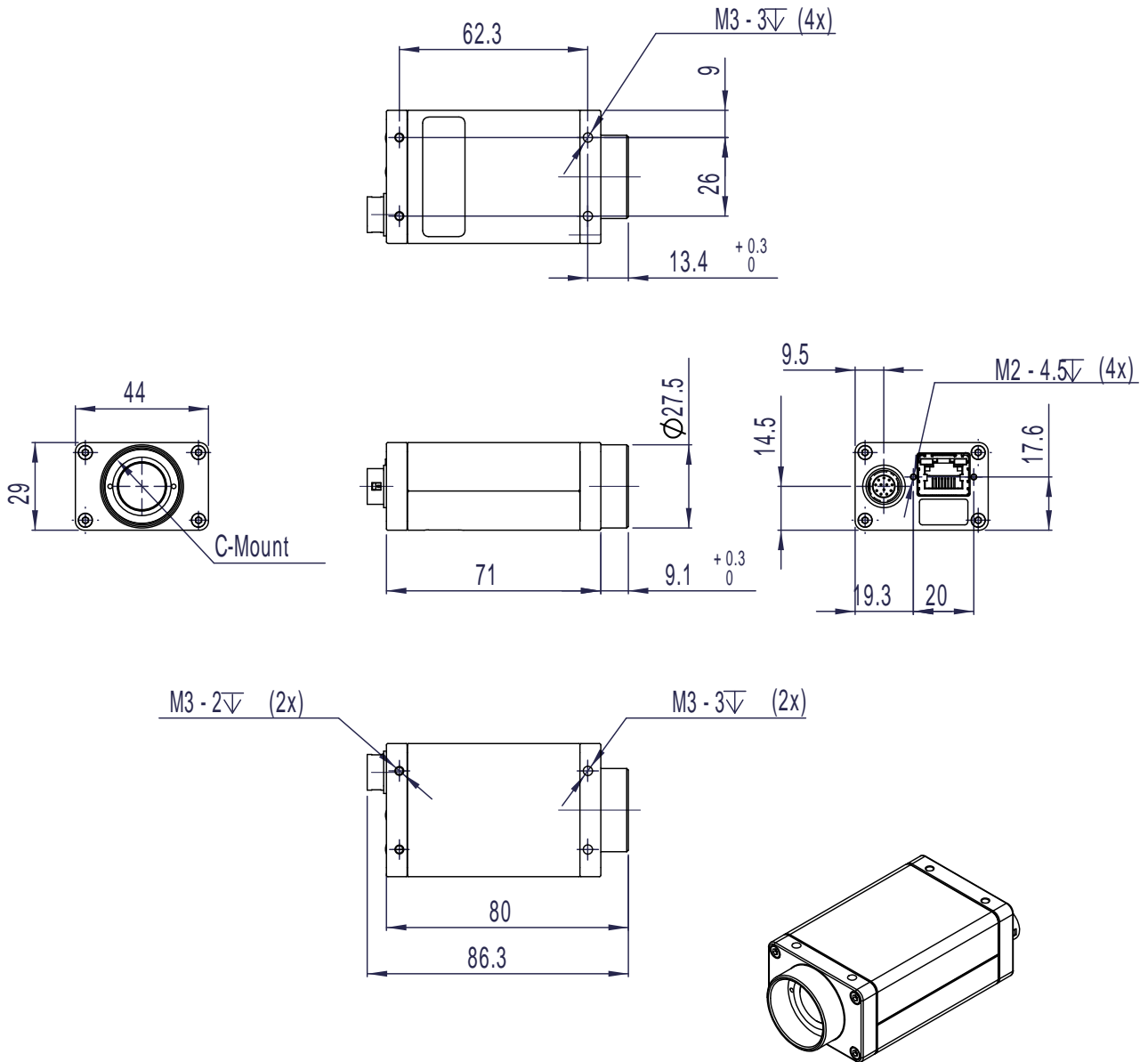
- Auto gain (manual gain control: 0 to 26 dB; 1 dB increments)
- Auto exposure (18  $\mu$ s to 126 s; 1  $\mu$ s increments)
- Auto white balance (G-223C only)
- Black level (offset)
- Color correction, hue, saturation (G-223C only)
- Decimation
- Gamma correction
- Three look-up tables (LUTs)
- Piecewise Linear HDR mode
- Pixel defect masking
- Region of interest (ROI), separate ROI for auto features
- Reverse X/Y



## Camera control features:

- Auto-iris (video type)
- Event channel
- Image chunk data
- IEEE 1588 Precision Time Protocol (PTP)
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring (main board)
- Trigger over Ethernet (ToE) Action Commands
- Non-volatile memory 1024 KByte (for selected models only)

## 外形尺寸





## 应用场景

Manta G-223 is a robust, flexible industrial camera with a sensitive CMOSIS/ams CMV2000 sensor.

Typical applications:

- Full HD solutions
- Machine vision
- Industrial inspection
- Security and surveillance
- Industrial image processing