

# Manta

## G-146



- 17.8 fps at full resolution
- PoE optional
- Angled-head and board level variants
- Video-iris lens control

## 基本描述

### GigE Vision camera with Sony ICX267 CCD sensor

Manta G-146 is a value packed GigE Vision camera. Manta G-146 is offered in both monochrome and color models. It incorporates the high quality Type 1/2 (8.0 mm diagonal) Sony ICX267 CCD sensor. At full resolution, this camera runs 17.8 frames per second. With a smaller region of interest, higher frame rates are possible.

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.

### Benefits and features:

- Monochrome (G-146B) and color (G-146C) 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)
- 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:

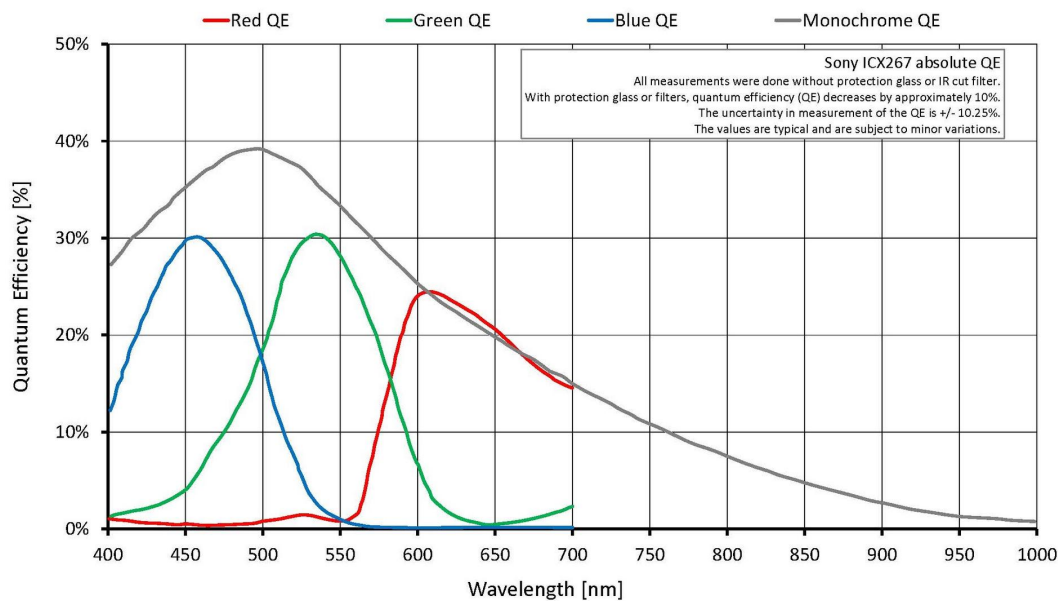
- Available with Power over Ethernet (PoE) compliant interface
- Available with CS-Mount or M12-Mount adapter
- Available with Protection glass B 270 (ASG), IRC type Jenofilt 217 (IR cut filter), IRC Hoya C-5000 (IR cut filter), IRP RG715 (IR pass filter), IRP RG830 (IR pass filter)
- Available with 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-146  |
| 接口             | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional |
| 分辨率            | 1388 (H) × 1038 (V)                                |
| 传感器            | Sony ICX267  |
| 传感器类型          | CCD Progressive                                    |
| 传感器尺寸          | Type 1/2   |
| 像元尺寸           | 4.65 μm × 4.65 μm                                  |
| 标准镜头接口         | C-Mount  |
| 最大满帧帧率         | 17.8 fps   |
| ADC            | 12 bit   |
| 缓存 (RAM)       | 32 MByte   |
| 非易失性内存 (Flash) | 192 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, RGBA8Packed, BGRA8Packed   |
| 原始像素格式         | BayerGB8, BayerGB12Packed, BayerGB12               |
|                | 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-146   |
| 功耗                  | 3.6 W at 12 VDC; 4.2 W PoE  |
| 重量                  | 200 g; 210 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:

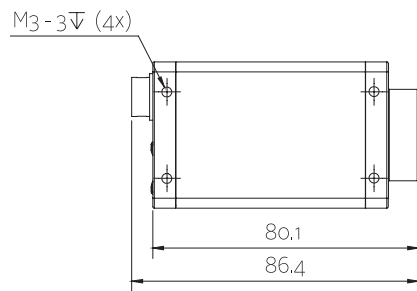
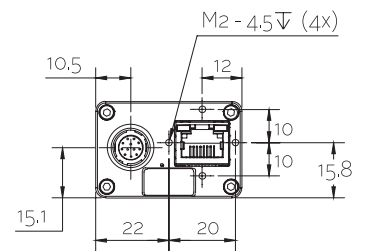
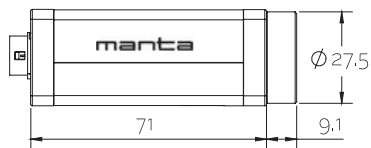
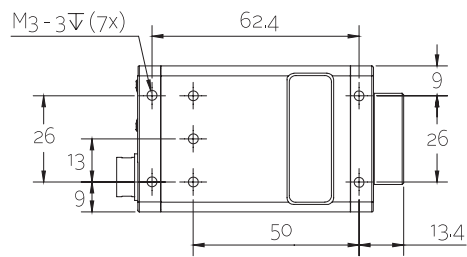
- Auto gain (manual gain control: 0 to 33 dB; 1 dB increments)
- Auto exposure (31  $\mu$ s to 60 s; 1  $\mu$ s increments)
- Auto white balance (G-146C only)
- Binning
- Black level (offset)
- Color correction, hue, saturation (G-146C only)
- Decimation
- Gamma correction
- Three look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features
- ReverseX (G-146B only)



## Camera control features:

- Auto-iris (video type)
- Event channel
- Image chunk data
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Non-volatile memory 192 KByte (for selected models only)

## 外形尺寸





## 应用场景

Manta G-146 is a value packed, flexible GigE Vision PoE camera. On request, board level versions with separate sensor head (up to 200 mm distance to camera mainboard) are available. Thanks to the three LUTs (separate R, G, and B control) and color correction features and the PoE option, this Manta camera suits a large variety of imaging applications.

- Machine vision
- Industrial inspection
- Logistics and automation
- Healthcare
- ITS (Intelligent traffic solutions)
- ... and many more