

Manta

G-146



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

Description

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

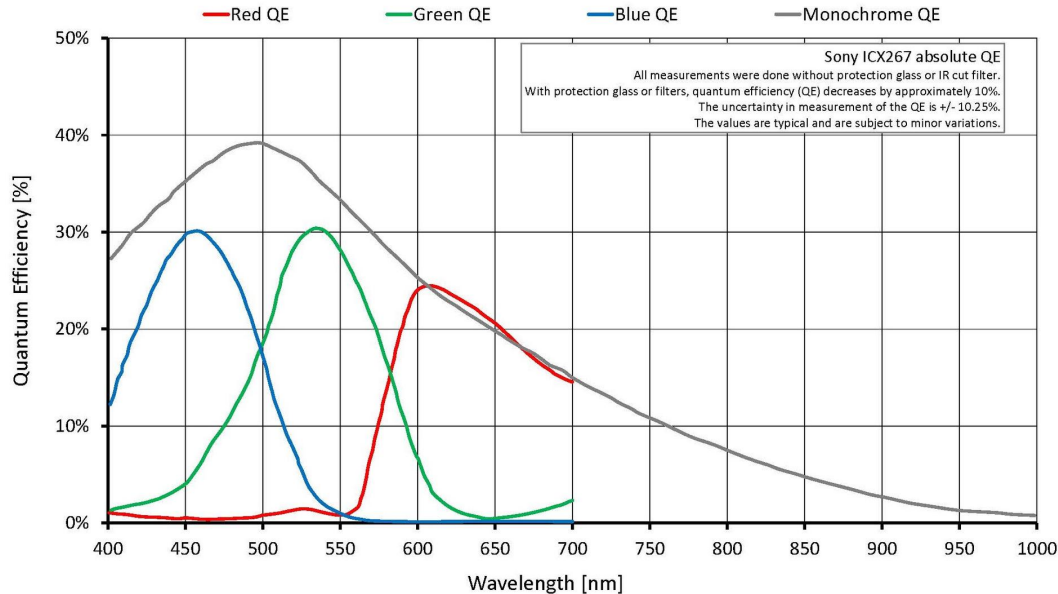
See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options. See the [Customization and OEM Solutions](#) webpage for additional options.

Specifications

| | |
|-----------------------------------|---|
| Manta | G-146 |
| インターフェイス | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional |
| 解像度 | 1388 (H) × 1038 (V) |
| センサー | Sony ICX267 |
| Sensor type | CCD Progressive |
| センサーサイズ | Type 1/2 |
| ピクセルサイズ | 4.65 μm × 4.65 μm |
| レンズマウント (標準搭載) | C-Mount |
| フレームレート (フル解像度) | 17.8 fps |
| ADC | 12 bit |
| Image buffer (RAM) | 32 MByte |
| | Output |
| Bit depth | 8/12 bit |
| ビデオフォーマット(Mono) | Mono8, Mono12, Mono12Packed |
| ビデオフォーマット(YUV) | YUV411Packed, YUV422Packed, YUV444Packed |
| ビデオフォーマット(RGB) | RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed |
| ビデオフォーマット(Raw) | BayerGB8, BayerGB12Packed, BayerGB12 |
| | General purpose inputs/outputs (GPIOs) |
| Opto-isolated I/Os | 2 inputs, 2 outputs |
| RS232 | 1 |
| | Operating conditions/dimensions |
| Operating temperature | +5 °C to +45 °C ambient (without condensation) |
| Power requirements (DC) | 8 to 30 VDC; PoE |
| 消費電力 | 3.6 W at 12 VDC; 4.2 W PoE |
| Mass | 200 g; 210 g (PoE) |
| Body dimensions (L × W × H in mm) | 86.4 × 44 × 29 (including connectors) |

Manta
Regulations

G-146
CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B; CAN ICES-003



Features

Image optimization features:

- Auto gain (manual gain control: 0 to 33 dB; 1 dB increments)
- Auto exposure (31 μ s to 60 s; 1 μ 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)

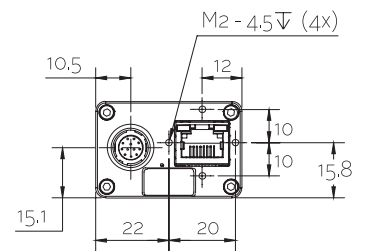
Camera control features:

- 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

Technical drawing





Applications

Manta G-146 is ideal for a wide range of applications including:

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