

# Manta

## G-145-30fps



- 30.1 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 ICX285 CCD sensor

Manta G-145-30fps is the high-speed version of the Manta G-145. Manta G-145-30fps is offered in both monochrome and color models. This machine vision camera incorporates the high quality Type 2/3 (11.0 mm diagonal) Sony ICX285 CCD sensor with EXview HAD technology. At full resolution, this camera runs 30.1 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-145B-30fps) and color (G-145C-30fps) 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:

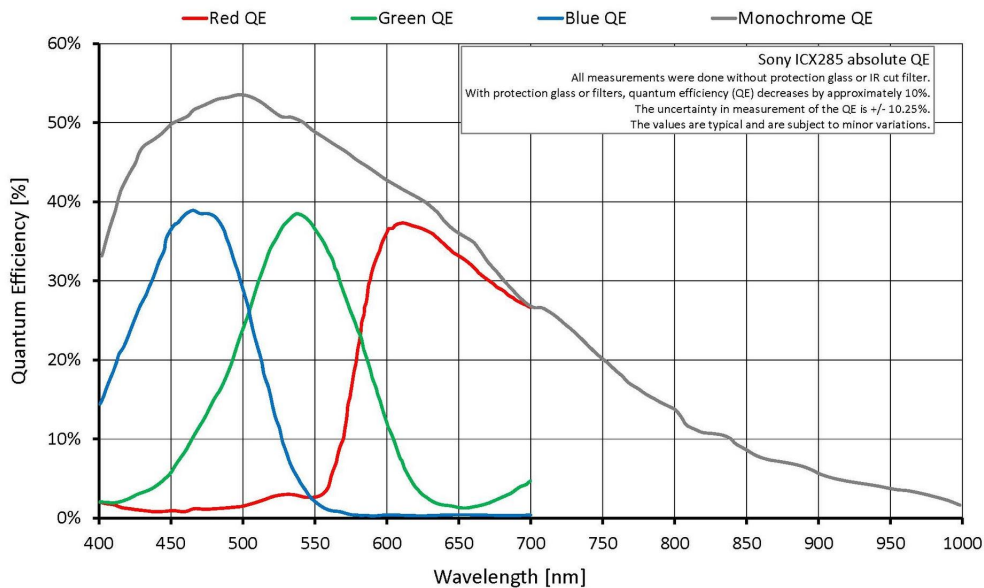
- Available with Power over Ethernet (PoE) compliant interface
- Available with CS-Mount or M12-Mount adapter
- Available with Protection glass B 270 (ASG), IRC type Jenofilt 217 (IR cut filter), IRC Hoya C-5000 (IR cut filter), IRP RG715 (IR pass filter), IRP RG830 (IR pass filter)
- Available with 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-145-30fps
接口	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
分辨率	1388 (H) × 1038 (V)
传感器	Sony ICX285
传感器类型	CCD Progressive
传感器尺寸	Type 2/3
像元尺寸	6.45 μm × 6.45 μm
标准镜头接口	C-Mount
最大满帧帧率	30.1 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	BayerRG8, BayerRG12Packed, BayerRG12
	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-145-30fps
功耗	4.5 W at 12 VDC; 5.3 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:

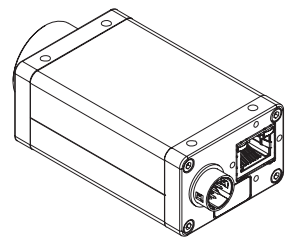
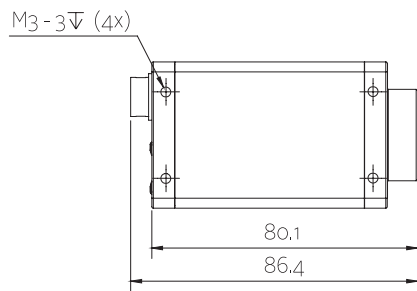
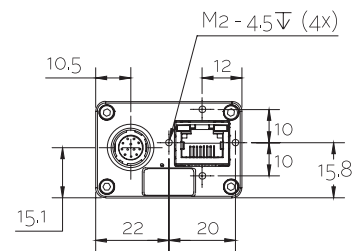
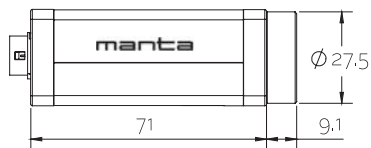
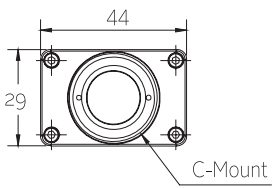
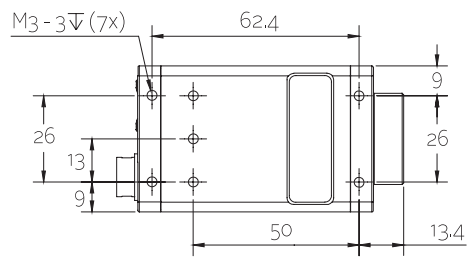
- Auto gain (manual gain control: 0 to 33 dB; 1 dB increments)
- Auto exposure (38  $\mu$ s to 60 s; 1  $\mu$ s increments)
- Auto white balance (G-145C-30fps only)
- Binning
- Black level (offset)
- Color correction, hue, saturation (G-145C-30fps only)
- Decimation
- Gamma correction
- Three look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features
- ReverseX (G-145B-30fps 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-145-30fps is a fast GigE camera for machine vision and medical imaging applications. Its sensor is very sensitive in the visible spectrum, and also suitable for applications which require NIR (near infrared) sensitivity. Like G-145, the 30fps version is also available as board level version with separate sensor head (up to 200 mm distance to camera mainboard).

- Machine vision
- Science and research
- Medical and healthcare
- Ophthalmology
- ITS/Traffic monitoring
- ... and many more

Application case studies:

- [Safe Sex Starts With Virtual Pillow Fight](#)  
Interactive billboard using Manta camera promotes “Designers Against AIDS” charity by inviting passers-by to join pillow fight with Belgian top model Hannelore Knuts.