

Manta G-145-30fps



- 30 fps @ 1.4 Megapixel
- PoE optional
- Angled head and boardlevel variants
- Video-iris lens control

Description

GigE Vision camera with Sony ICX285 - 30fps - PoE option

Manta G-145B/C-30fps is the high-speed version of the Manta G-145B/C. It runs at 30 fps. With a smaller ROI, even higher frame rates are possible.

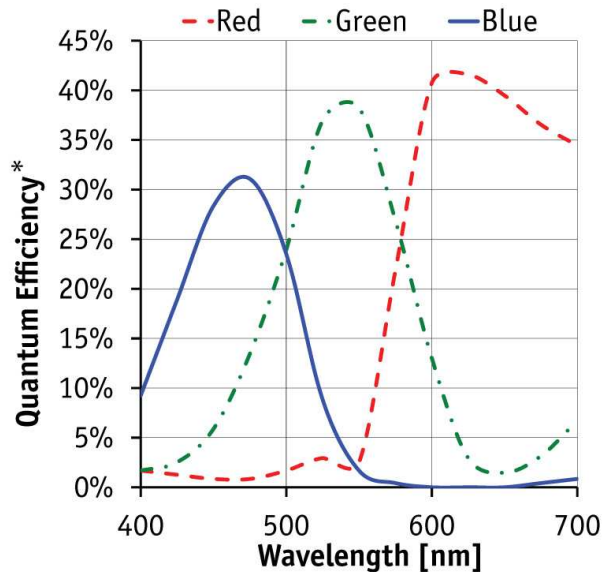
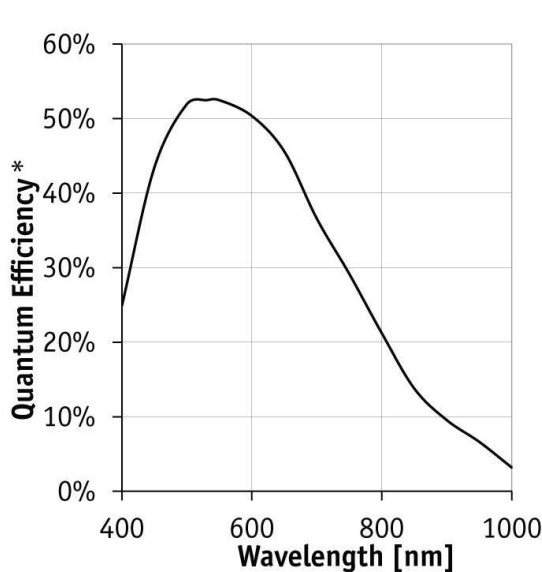
Options

- PoE (Power over Ethernet)
- Various IR cut/pass filters and lens mounts
- Angled head, board level version, white medical housing

Specifications

Manta	G-145-30fps
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1388 × 1038
Sensor	Sony ICX285
Sensor type	CCD Progressive
Sensor size	Type 2/3
Cell size	6.45 μm
Lens mount	C/CS-Mount
Max frame rate at full resolution	30 fps
ADC	12 bit
On-board FIFO	32 Mbyte
Output	
Bit depth	8-12 bit
Mono modes	Mono8, Mono12, Mono12Packed

Manta	G-145-30fps
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerRG8, BayerRG12Packed, BayerRG12
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
Operating conditions/dimensions	
Operating temperature	+5 °C ... +45 °C
Power requirements (DC)	PoE, or 8-30 VDC
Power consumption (@12 V)	5.3 W (PoE) / 4.5 W (non-PoE)
Mass	210 g (PoE) / 200 g (non-PoE)
Body dimensions (L × W × H in mm)	86.4 × 44 × 29 mm incl. connectors
Regulations	CE, FCC Class B, RoHS



*QE measured without protection glass or filters. With glass or filters, quantum efficiency decreases by approximately 10%.

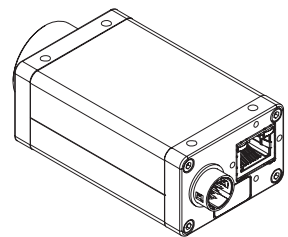
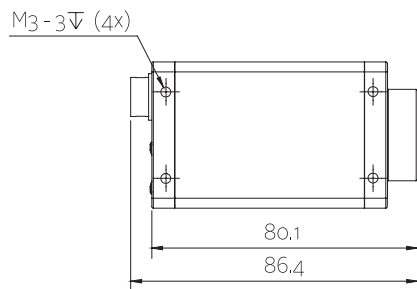
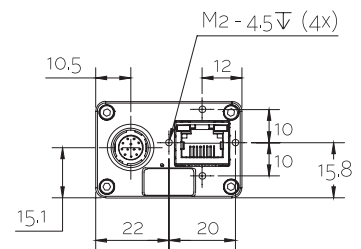
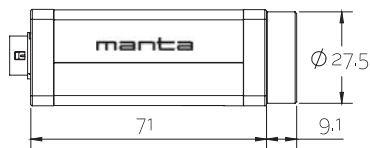
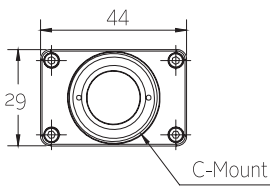
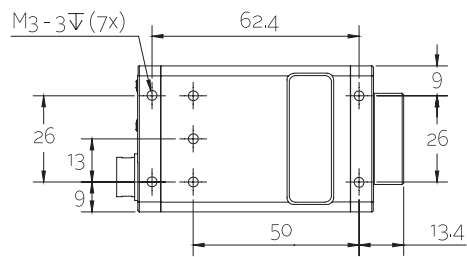
Features

- Video-type auto iris
- ROI, separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 33 dB)
- Auto exposure (38 μs to 60 s)



- Auto white balance
- LUTs (look-up tables)
- Gamma
- Hue, saturation, color correction
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Event channel
- Chunk data
- Storable user sets

Technical drawing



Applications

Manta G-145B/C-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-145B/C, the 30fps version is also available as boardlevel 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.