Allied Vision

Manta
G-146

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

Description

GigE Vision camera with Sony ICX267 and PoE option

Manta G-146B/C is a value packed GigE Vision camera with a Sony ICX267 sensor. It runs at 17 fps (full resolution). With a smaller ROI, higher frame rates are possible. It incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options.
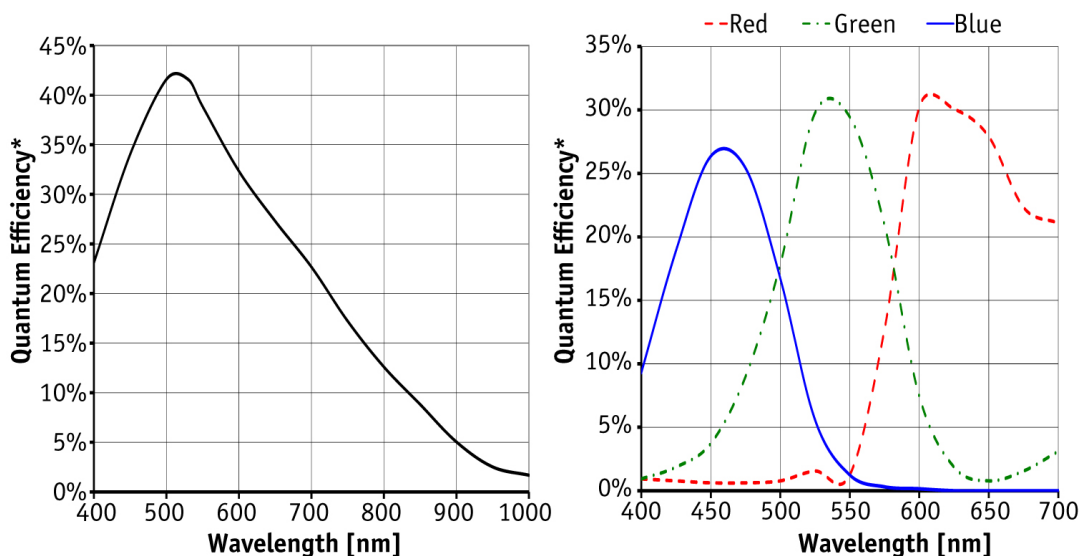Options

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

Specifications

Manta	G-146
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1388 × 1038
Sensor	Sony ICX267
Sensor type	CCD Progressive
Sensor size	Type 1/2
Cell size	4.65 µm
Lens mount	C/CS-Mount
Max frame rate at full resolution	17 fps
ADC	12 bit
On-board FIFO	32 Mbyte
Output	
Bit depth	8-12 bit

Manta	G-146
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerGB8, BayerGB12Packed, BayerGB12
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)	4.2 W (PoE) / 3.6 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%.
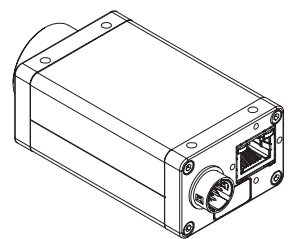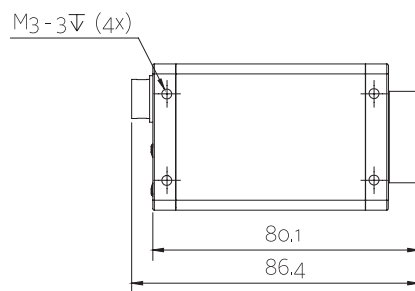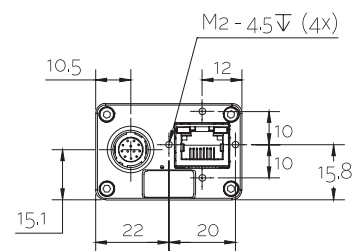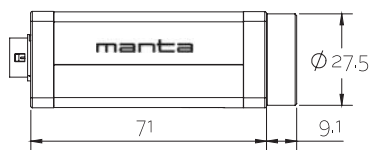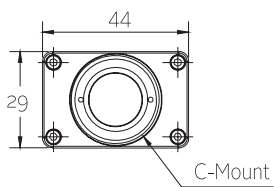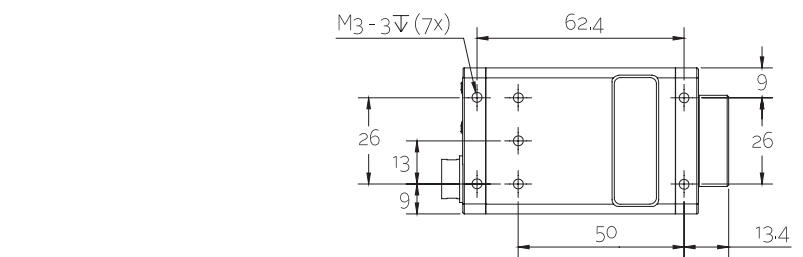
Features

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

- Auto exposure (31 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

M3 - 3 ▽ (7x)   62.4   9   26
26   13   9   50   13.4

44   29   C-Mount

manta   Ø 27.5   71   9.1

M2 - 4.5 ▽ (4x)
10.5   12   10   10   15.8
15.1   22   20

M3 - 3 ▽ (4x)
80.1   86.4

Applications

Manta G-146B/C 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