Allied Vision

Manta
G-145

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

Description

GigE Vision camera with Sony ICX285 EXview HAD CCD, PoE option

Manta G-145B/C is an inexpensive GigE Vision camera with the very sensitive Sony ICX285 EXview HAD sensor. It runs at 15 fps (full resolution). The Manta incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options.
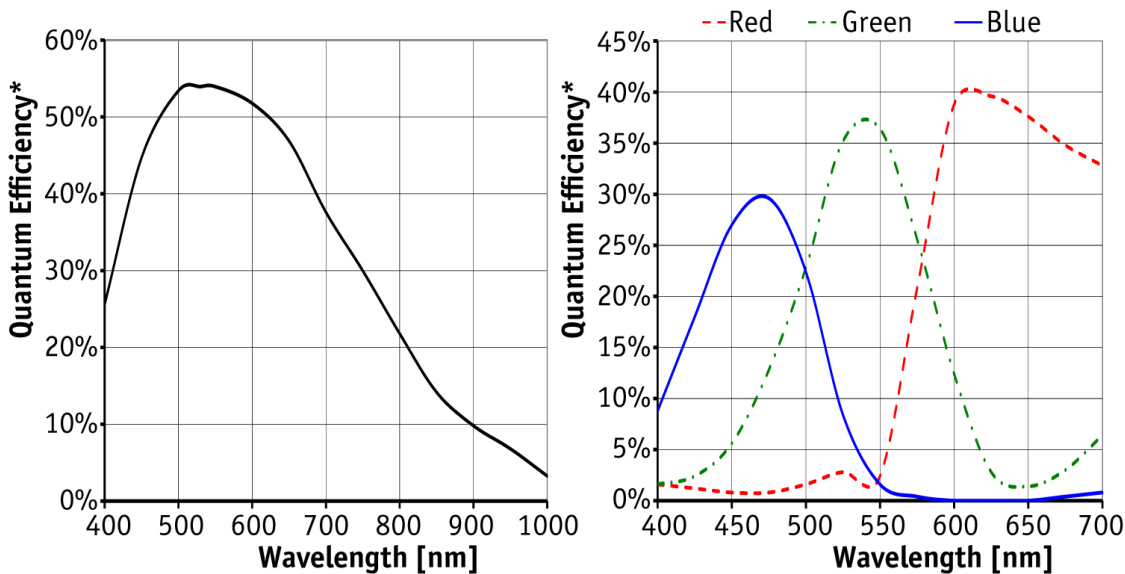Options

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

Specifications

Manta	G-145
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	15 fps
ADC	12 bit
On-board FIFO	32 Mbyte
Output	
Bit depth	8-12 bit

Manta	G-145
Mono modes	Mono8, Mono12, Mono12Packed
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)	4.3 W (PoE) / 3.7 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%.
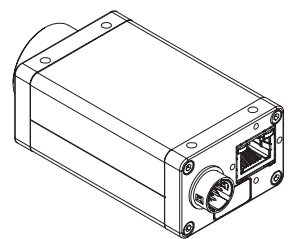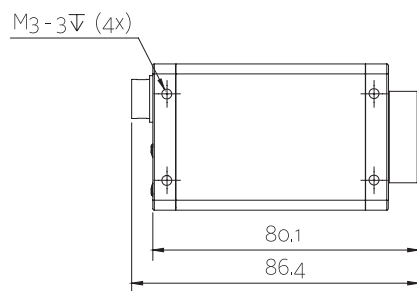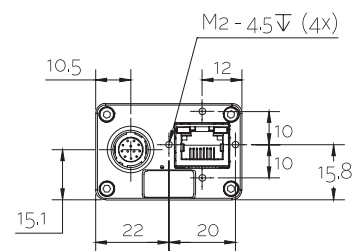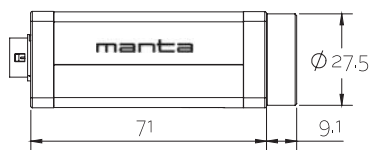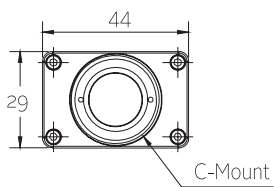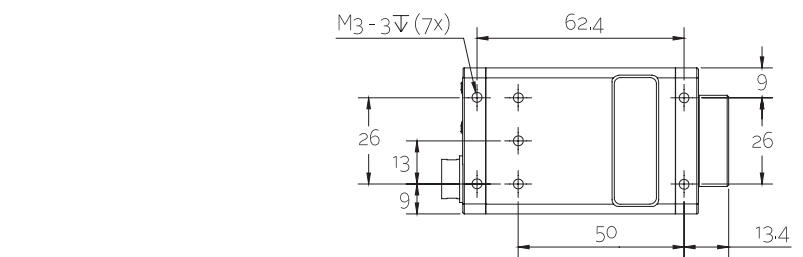
Features

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

- Auto exposure (43 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-145B/C is a very affordable GigE Vision 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. On request, board level versions with separate sensor head (up to 200 mm distance to camera mainboard) are available.

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