Allied Vision

Manta
G-145-30fps

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

Description

GigE Vision camera with Sony ICX285 sensor, 30 fps, PoE option

Manta G-145B-30fps/G-145C-30fps is the high-speed version of the Manta G-145B/G-145C. At full resolution, this camera runs at 30.1 frames per second. With a smaller region of interest, even higher frame rates are possible.
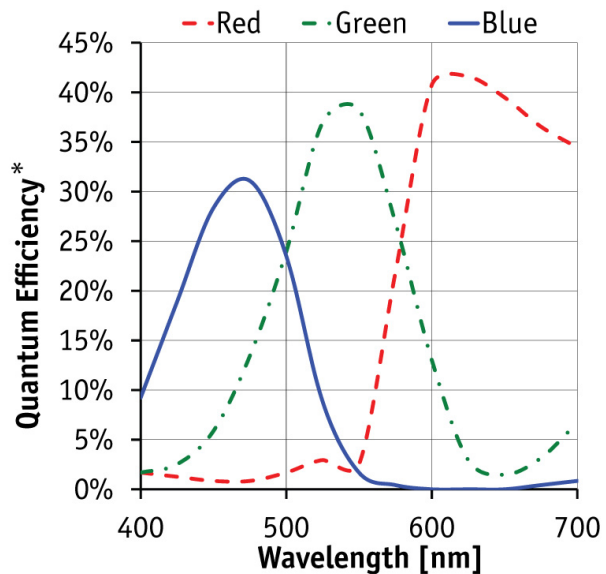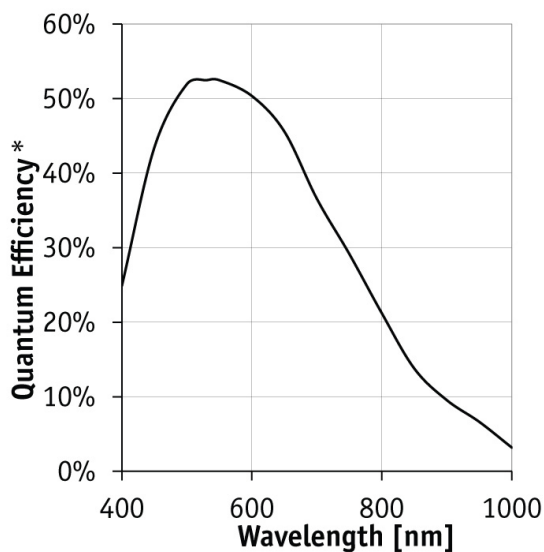
Options

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

See the#Modular Concept#for lens mount, housing variants, optical filters, case design, and other modular options.

Specifications

Manta	G-145-30fps
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1388 (H) × 1038 (V)
Sensor	Sony ICX285
Sensor type	CCD Progressive
Cell size	6.45 µm x 6.45 µm
Lens mount	C-Mount
Max frame rate at full resolution	30.1 fps
ADC	12 bit
Image buffer (RAM)	32 Mbyte
Output	

Manta	G-145-30fps
Bit depth	8-12 bit
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 to +45 °C ambient (without condensation)
Power requirements (DC)	8 to 30 VDC; PoE
Power consumption (@12 V)	4.5 W @ 12 VDC; 5.3 W PoE
Mass	200 g; 210 g (PoE)
Body dimensions (L × W × H in mm)	86.4 × 44 × 29 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES

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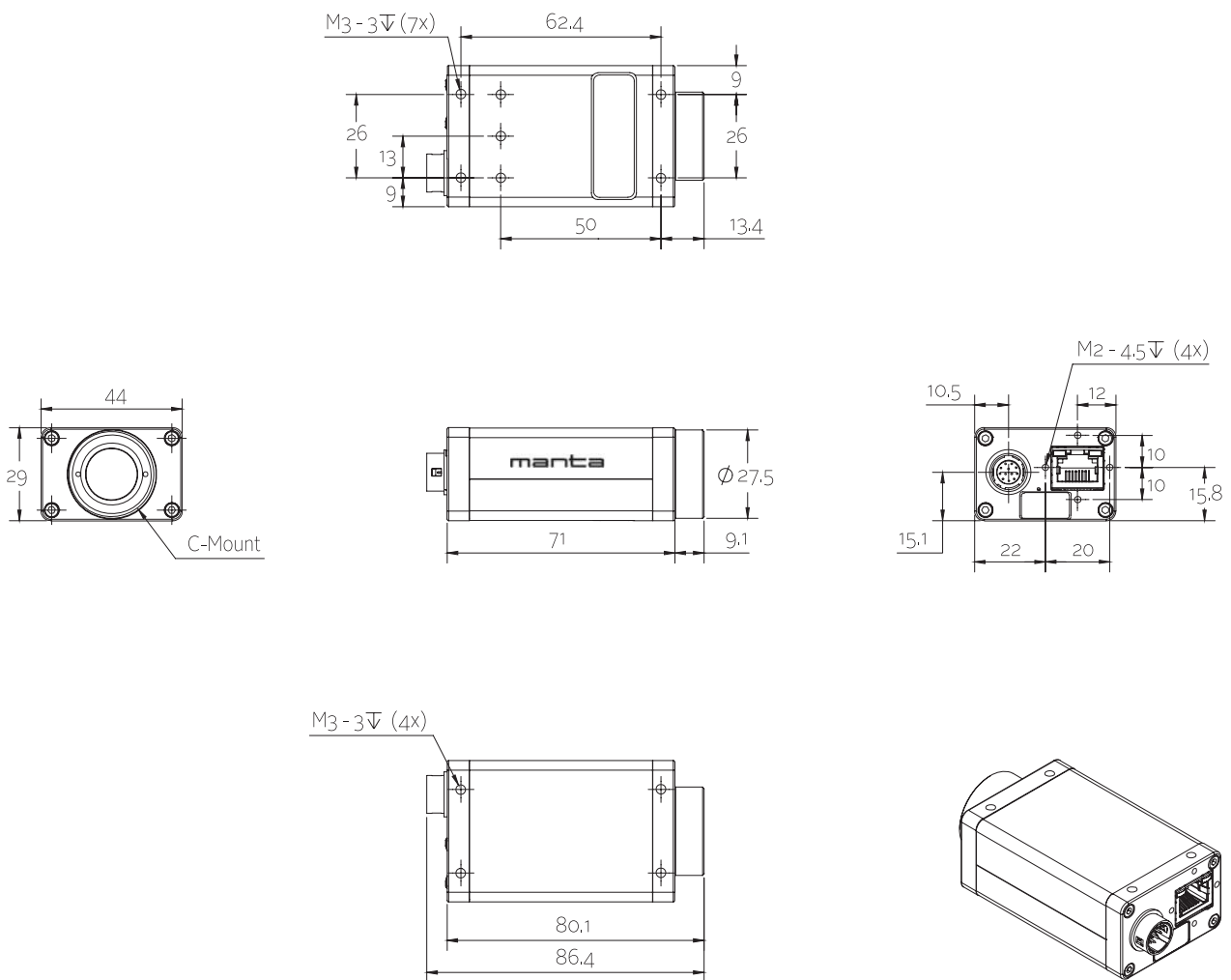
Features

Manta G-145B-30fps/G-145C-30fps features include:

- Video-type auto iris
- Region of interest (ROI), separate ROI for auto features

- Binning
- Decimation
- Auto gain (manual gain control: 0 to 33 dB)
- Auto exposure (38 #s to 60 s)
- Auto white balance
- Look-up tables (LUTs)
- 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-30fps/G-145C-30fps is ideal for a wide range of applications including:

- Machine vision
- Science and research
- Medical and healthcare
- Ophthalmology
- Intelligent traffic solutions (ITS)/Traffic monitoring

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.