

Manta

G-145



- 15.0 fps @ full resolution
- Power over Ethernet option
- Angled head and board level variants
- Video-iris lens control

Description

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

Manta G-145B/G-145C is an inexpensive GigE Vision camera with the very sensitive Type 2/3 (11.0 mm diagonal) Sony ICX285 CCD sensor with EXview HAD technology. At full resolution, this camera runs 15.0 frames per second. With a smaller region of interest, higher frame rates are possible. The 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.

Options:

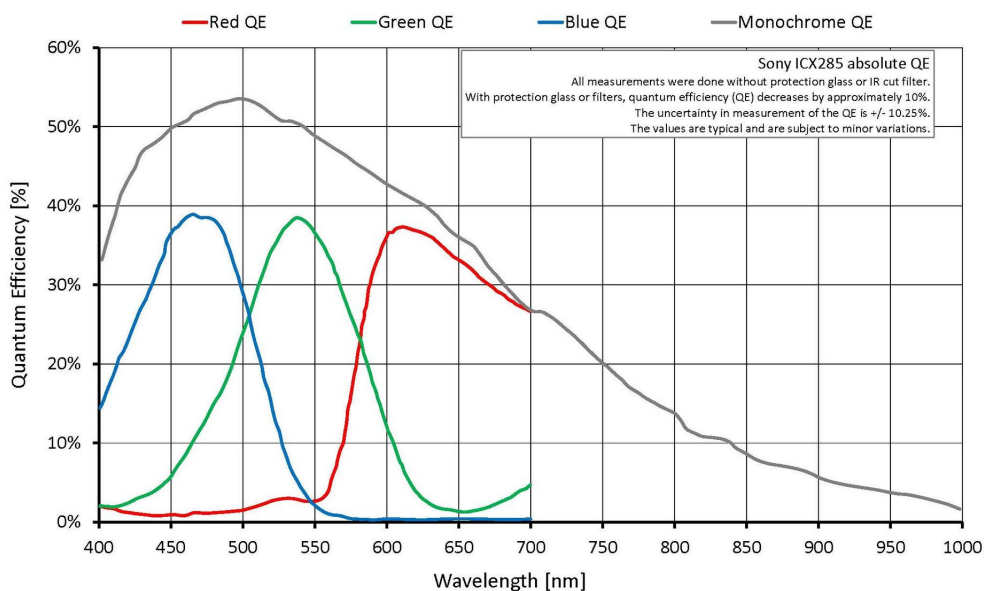
- Power over Ethernet (PoE)
- Various optical filter and lens mount options
- Angled head, board level variants, white medical housing

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

Specifications

Manta	G-145
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

Manta	G-145
Lens mount	C-Mount
Max frame rate at full resolution	15.0 fps
ADC	12 bit
Image buffer (RAM)	32 MByte
Output	
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)	3.7 W; 4.3 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





Features

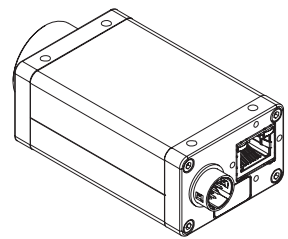
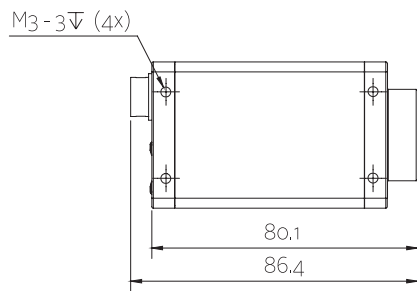
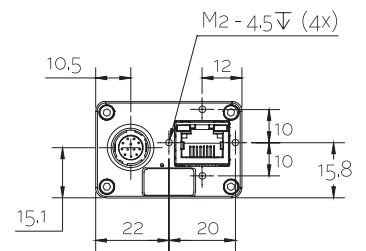
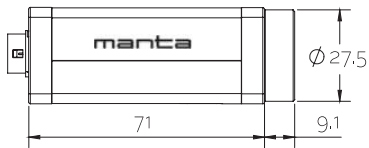
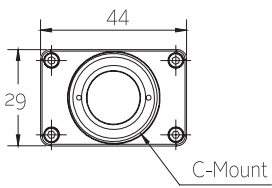
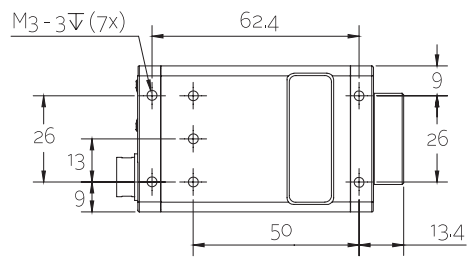
Image optimization features:

- Auto gain (manual gain control: 0 to 33 dB; 1 dB increments)
- Auto exposure (43 μ s to 60 s; 1 μ s increments)
- Auto white balance (color models only)
- Binning
- Black level (offset)
- Color correction, hue, saturation (color models only)
- Decimation
- Gamma correction
- Look-up tables (LUTs) (3)
- Region of interest (ROI), separate ROI for auto features
- ReverseX (monochrome models only)

Camera control features:

- Auto-iris (video type)
- Event channel
- Image chunk data
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

Technical drawing





Applications

Manta G-145B/G-145C is ideal for a wide range of applications including:

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