

# Manta

## G-145



- 15.0 fps @ full resolution
- PoE 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 Sony ICX285 EXview HAD sensor. At full resolution, this camera runs at 15.0 frames per second. This camera incorporates three look-up tables, sophisticated color correction algorithms, a robust metal housing, and many modular options.

### Options

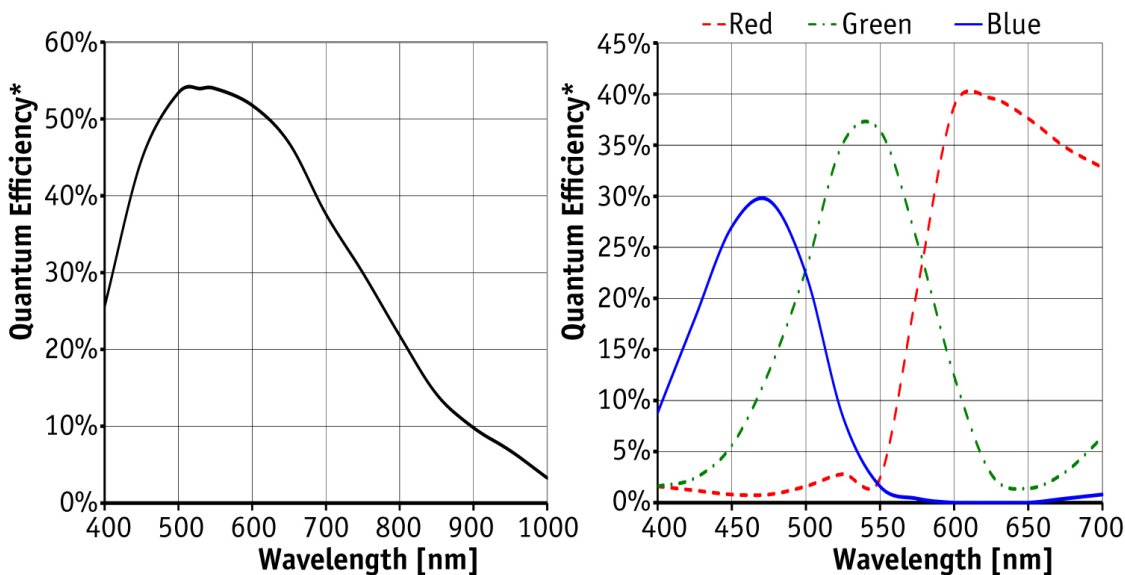
- Power over Ethernet (PoE)
- Various IR cut/pass filters and lens mounts
- Angled head, board level variants, white medical housing

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

## Specifications

Manta	G-145
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	15.0 fps
ADC	12 bit
Image buffer (RAM)	32 Mbyte

Manta	G-145
	<b>Output</b>
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
<b>General purpose inputs/outputs (GPIOs)</b>	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
<b>Operating conditions/dimensions</b>	
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



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

## Features

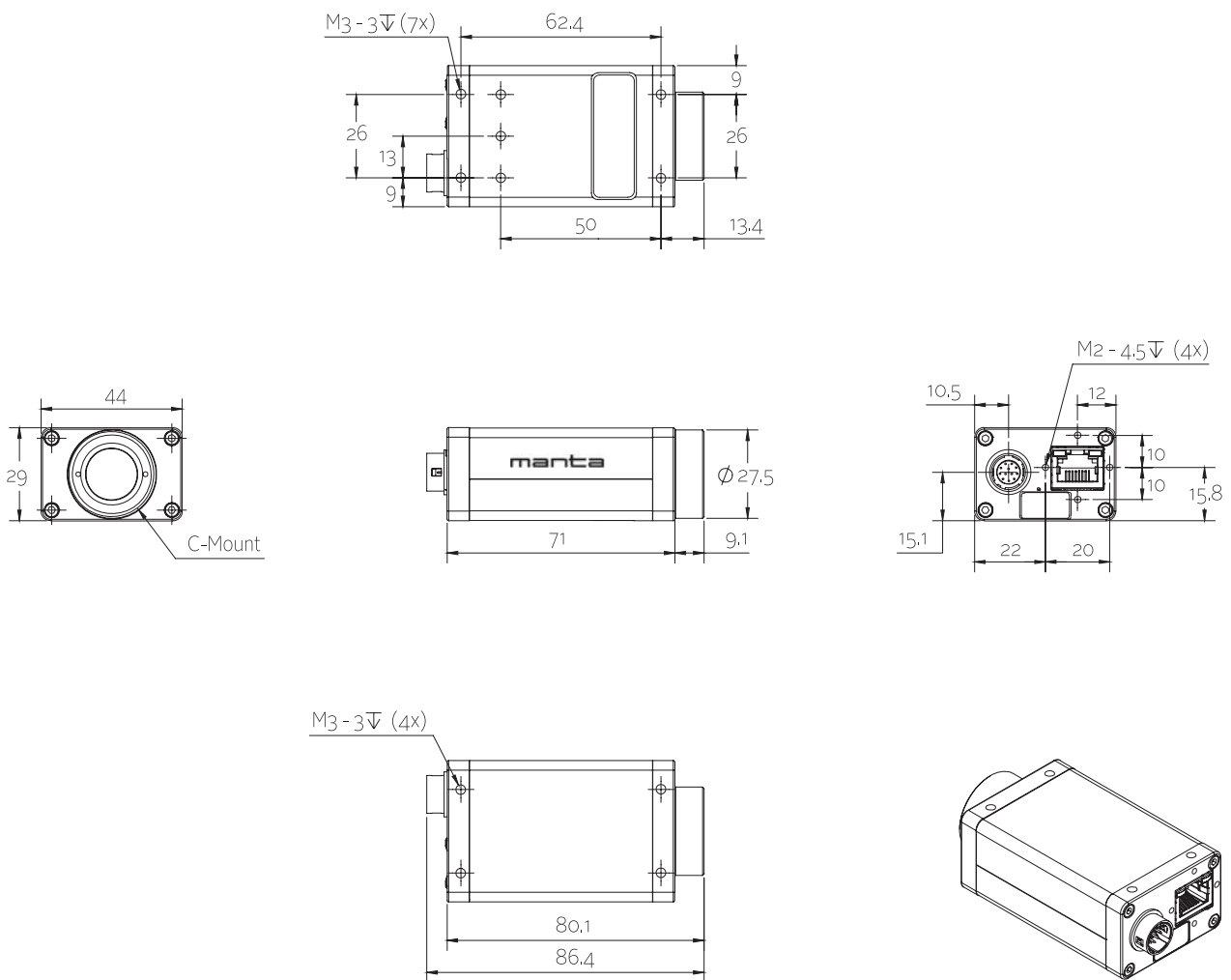
Manta G-145B/G-145C features include:

- 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 (43 #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



## Applications

Manta G-145/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