

Manta G-504



Description

5 Megapixel GigE camera, ICX655 - PoE option

The Manta G-504B/C is a 5 Megapixel GigE Vision camera with the Sony ICX655 sensor. It runs at 9 fps (full resolution).

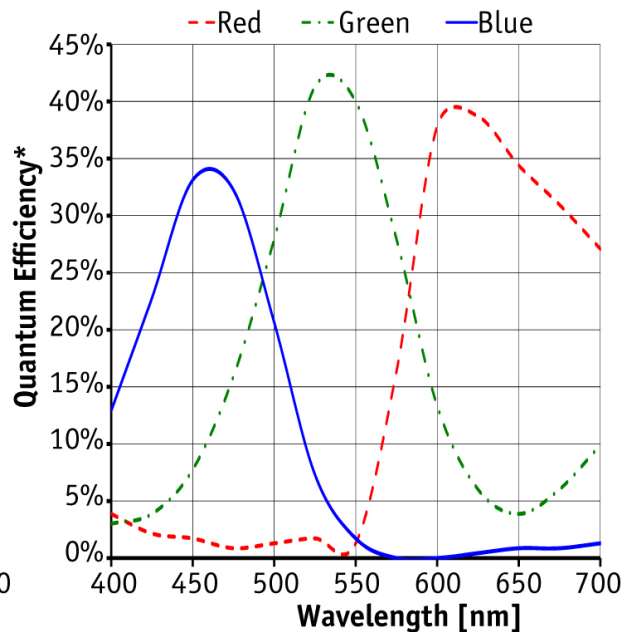
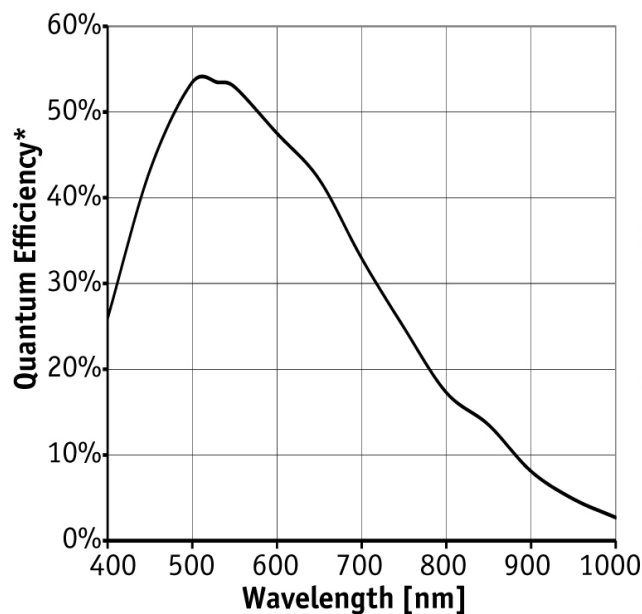
The camera incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options like angled heads or board level versions. Manta cameras cover a wide range of imaging applications. The Manta is optionally available with PoE (Power over Ethernet).

- Sony ICX655 (type 2/3), 5 Megapixels
- Sync modes
 - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Trigger
 - External trigger event: rising/falling/any edge, level high/low
 - External trigger delay: 0 to 60 seconds in 1 μ s increments
- Modular options
 - Various IR cut/pass filters
 - Board level version
 - Angled head
 - White medical design
 - PoE (Power over Ethernet)

Specifications

Manta		G-504	
Interface		IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional	
Resolution		2452 x 2056	
Sensor		Sony ICX655	
Sensor type		CCD Progressive	
Sensor size		Type 2/3	
Cell size		3.45 µm	
Lens mount		C/CS-Mount	
Max frame rate at full resolution		9 fps	
A/D		14 bit	
On-board FIFO		32 MB	
		Output	
Bit depth		8-12 bit	
Mono modes		Mono8, Mono12, Mono12Packed	
Color modes YUV		YUV411, YUV422, YUV444	
Color modes RGB		RGB24, BGR24	
Raw modes		BayerGB8, BayerGB12, BayerGB12Packed	
		General purpose inputs/outputs (GPIOs)	
Opto-coupled I/Os		2 inputs, 2 outputs	
RS-232		1	
		Operating conditions/Dimensions	
Operating temperature		+5 °C ... +45 °C	
Power requirements (DC)		8 V - 30 V	
Power consumption (12 V)		<3.9 W	
Mass		<200 g	
Body Dimensions (L x W x H in mm)		86.4 x 44 x 29 mm incl. connectors	
Regulations		CE, FCC Class B, RoHS	

[Download Manta technical drawing \(click here\)](#)



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

Smart features

- ROI (Region of Interest Readout)
- Exposure
 - Auto/one push/programmable
 - Exposure time 38 μ s to 60 s
- White balance
 - Auto/one push/programmable
- On-board debayering
- Hue, saturation, sharpness (color versions)
- Gain
 - Auto/one push/programmable
 - Manual gain control: 0 to 32 dB (1 dB/step)
- Three look-up tables (LUTs), gamma correction
- DSP subregion (selectable ROI for auto features)
- Binning (up to 8 x 14, independent x and y binning)
- Sub-sampling (decimation)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- Event channel
- Chunk data
- 5 storable user sets

Applications

The Manta G-504B/C is a 5 Megapixel GigE Vision camera with an outstanding price/performance ratio. 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), color correction features and the PoE option, this Manta camera suits a large variety of imaging applications.

Applications:

- Industrial inspection with high resolution
- Automation
- Logistics
- Science and research
- Healthcare and medical
- ITS (Intelligent traffic solutions)
- ... and many more