



Manta G-125

Description

GigE Vision camera with Sony ICX445 EXview HAD sensor and PoE option

The Manta G-125B/C is a low cost GigE Vision camera with a Sony ICX445 sensor. It runs at 30 fps (full resolution). With a smaller ROI, higher frame rates are possible.

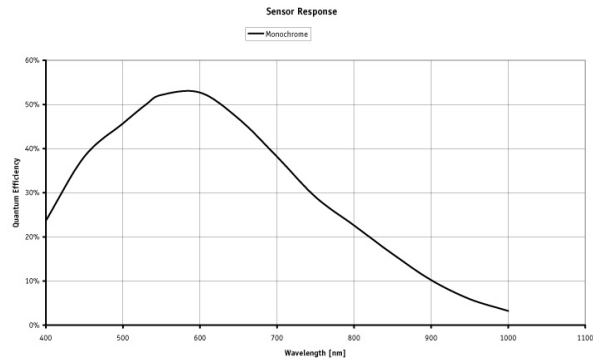
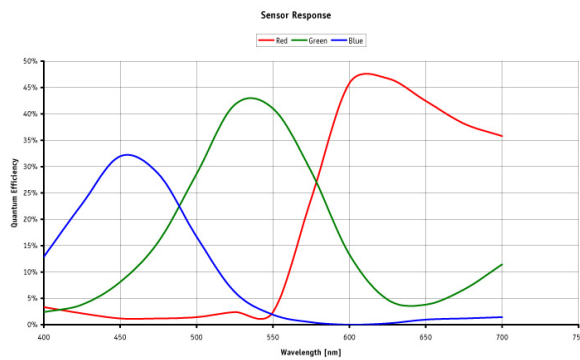
This camera incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options like angled heads or board level versions. Manta cameras cover a wide range of imaging applications. The Manta is **now optionally available with PoE (Power over Ethernet)**.

- Sony ICX445 (type 1/3) EXview HAD, 1.2 Megapixels
- Trigger
 - External trigger event: rising/falling/any edge, level high/low
 - External trigger delay: 0 to 60 seconds in 1 μ s increments
- Sync modes
 - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Modular options
 - Various IR cut/pass filters
 - CS-Mount
 - Board level version
 - Angled head
 - **NEW: PoE (Power over Ethernet)**

Specifications

Manta G-125	
Interface	IEEE 802.3 1000baseT
Resolution	1292 x 964
Sensor	Sony ICX445
Sensor type	CCD Progressive
Sensor size	Type 1/3
Cell size	3.75 µm
Lens mount	C/CS
Max frame rate at full resolution	30 fps
A/D	14 bit
On-board FIFO	32 MB
Output	
Bit depth	8-12 bit
Mono modes	Mono8, Mono16, Mono12 packed
Color modes YUV	YUV411, YUV422, YUV444
Color modes RGB	RGB24, BGR24
Raw modes	Bayer8, Bayer16, Bayer12 packed
General purpose inputs/outputs (GPIOs)	
Opto-coupled I/Os	2 inputs, 2 outputs
RS-232	1
Operating conditions/Dimensions	
Power requirements (DC)	8 V - 30 V
Power consumption (12 V)	<3.6 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 \(click here\)](#)



Smart features

- ROI (Region of Interest Readout)
- Exposure
 - Auto/one push/programmable
 - Exposure time 21 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 31 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
- Video-type auto-iris
- 5 storable user sets

Applications

The Manta G-125B/C is a sensitive GigE Vision camera with Sony's ICX445 sensor. Like the other Manta cameras, it is equipped with three separate LUTs for R, G, and B, color correction, and many other features. On request, board level versions with separate sensor head (up to 200 mm to camera mainboard) are available.

- Applications which require high sensitivity (low light)
- Quality control
- ITS (Intelligent traffic solutions)
- Semiconductor inspection
- 3D inspection
- Food inspection
- ... and many more