



## 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.

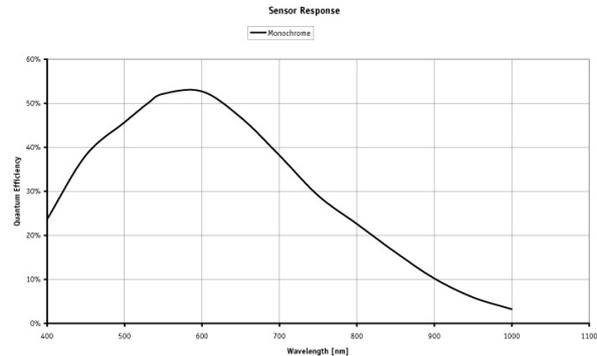
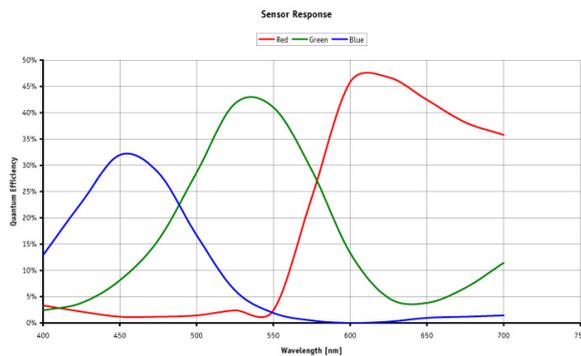
This camera incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options like angled heads or board level versions. Manta cameras cover a wide range of imaging applications. The Manta is **now optionally available with PoE (Power over Ethernet)**.

- 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  $\mu$ 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

<b>Manta</b>		<b>G-125</b>	
<b>Interface</b>	IEEE 802.3 1000baseT		
<b>Resolution</b>	1292 x 964		
<b>Sensor</b>	Sony ICX445		
<b>Type</b>	CCD Progressive		
<b>Sensor Size</b>	Type 1/3		
<b>Cell size</b>	3.75 µm		
<b>Lens mount</b>	C/CS		
<b>Max frame rate at full resolution</b>	30 fps		
<b>A/D</b>	14 bit		
<b>On-board FIFO</b>	32 MB		
<b>Output</b>			
<b>Bit depth</b>	8-12 bit		
<b>Mono modes</b>	Mono8, Mono16, Mono12 packed		
<b>Color modes YUV</b>	YUV411, YUV422, YUV444		
<b>Color modes RGB</b>	RGB24, BGR24		
<b>Raw modes</b>	Bayer8, Bayer16, Bayer12 packed		
<b>General purpose inputs/outputs (GPIOs)</b>			
<b>TTL I/Os</b>	0		
<b>Opto-coupled I/Os</b>	2 inputs, 2 outputs		
<b>RS-232</b>	1		
<b>Power/Mass/Dimensions/Regulations</b>			
<b>Power requirements (DC)</b>	8 V - 30 V		
<b>Power consumption (12 V)</b>	<3.6 W		
<b>Mass</b>	<200 g		
<b>Body Dimensions (L x W x H in mm)</b>	86.4 x 44 x 29 mm incl. connectors		
<b>Regulations</b>	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  $\mu$ 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