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Vision Technologies

SEEING IS BELIEVING

Manta
G-125

Description

Low cost GigE Vision camera with Sony ICX445 ExView HAD sensor

The Manta G-125B/C is a low cost GigE Vision camera with 1.2 MP resolution and a Sony ICX445 sensor. It runs at 30 fps (full resolution). With a smaller ROI, higher frame rates are possible.
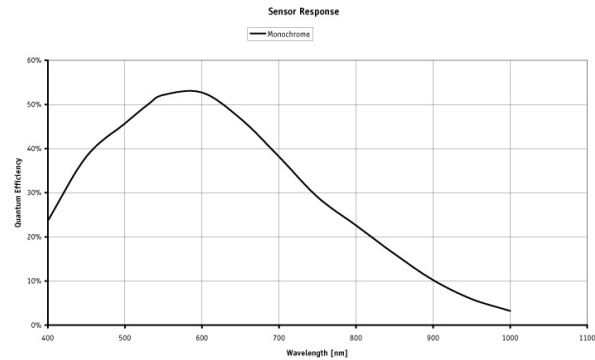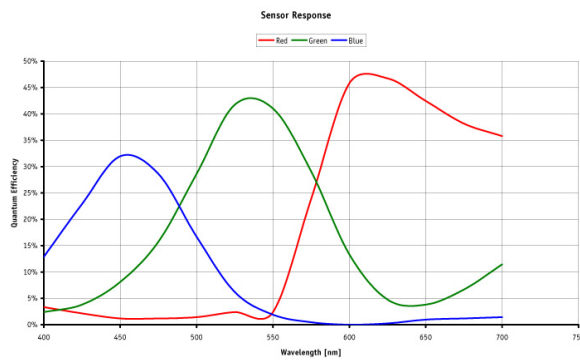The color version includes color interpolation/color correction functions that outperform most cameras in this price class.

- 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 µs 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

Specifications

Manta	G-125
Interface	IEEE 802.3 1000baseT
Resolution	1292 x 964
Sensor	Sony ICX445
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
Color modes YUV	YUV411, YUV422, YUV444
Color modes RGB	RGB24, BGR24
Raw modes	Bayer8, Bayer16
General purpose inputs/outputs (GPIOs)	
TTL I/Os	0
Opto-coupled I/Os	2 inputs, 2 outputs
RS-232	1
Power/Mass/Dimensions/Regulations	
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 28.5 µs to 60 s
- White balance
  - Auto/one push/programmable)
- Hue, saturation, sharpness (color versions)
- Gain
  - Auto/one push/programmable
  - Manual gain control: 0 to 24 dB (1 dB/step)
- Gamma (0.5)
- DSP subregion (selectable ROI for auto features)
- Binning (up to 8 x 8, independent x and y binning)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- On-board debayering
- 3 storable user sets

Applications

The Manta G-125B/C is a sensitive, robust GigE Vision camera with Sony's ICX445 sensor for quality control and other machine vision applications.

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