Manta
G-146

Description

GigE Vision camera with Sony ICX267 and PoE option

The Manta G-146B/C is a value packed GigE Vision camera with a Sony ICX267 sensor. It runs at 17 fps (full resolution). With a smaller ROI, higher frame rates are possible.
It 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 ICX267 (type 1/2), 1.4 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 µs increments
- Modular options
  - Various IR cut/pass filters
  - CS-Mount
  - Board level version
  - Angled head
 - White medical housing
  - **NEW: PoE (Power over Ethernet)**

Specifications

Manta	G-146
Interface	IEEE 802.3 1000baseT
Resolution	1388 x 1038
Sensor	Sony ICX267
Type	CCD Progressive
Sensor Size	Type 1/2
Cell size	4.65 µm
Lens mount	C/CS
Max frame rate at full resolution	17 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)	
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)

Sensor Response

Sensor Response
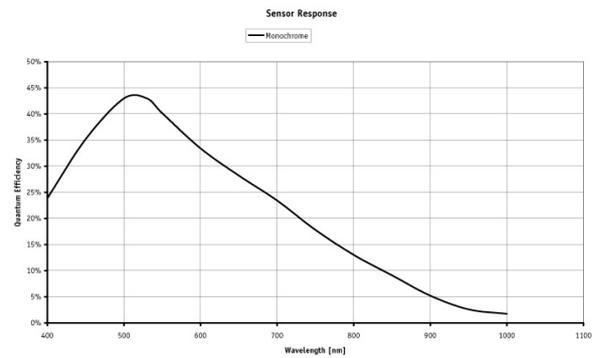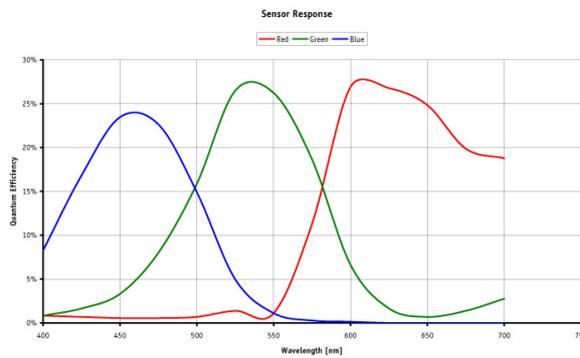
Smart features

- ROI (Region of Interest Readout)
- Exposure
  - Auto/one push/programmable
  - Exposure time 31 µs 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 33 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-146B/C is a value packed, flexible GigE Vision PoE camera. 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) and color correction features and the PoE option, this Manta camera suits a large variety of imaging applications.

- Machine vision
- Industrial inspection
- Logistics and automation
- Healthcare
- ITS (Intelligent traffic solutions)
- ... and many more