Manta
G-201

Description

GigE Vision camera, 2 Megapixels, Sony ICX274, PoE option

The Manta G-201B/C is a low cost GigE Vision camera with a Sony ICX274 sensor. It runs at 14 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 ICX274 (type 1/1.8), 2 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
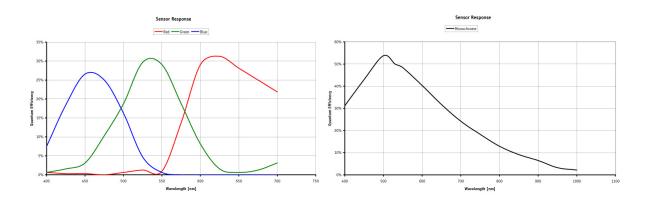   - White medical housing
    - **NEW: PoE (Power over Ethernet)**

Specifications

Manta	G-201
Interface	IEEE 802.3 1000baseT
Resolution	1624 x 1234
Sensor	Sony ICX274
Type	CCD Progressive
Sensor Size	Type 1/1.8
Cell size	4.4 µm
Lens mount	C/CS
Max frame rate at full resolution	14 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 graphs (Red/Green/Blue and Monochrome)

Smart features

- ROI (Region of Interest Readout)
- Exposure
  - Auto/one push/programmable
  - Exposure time 51 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 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
- 5 storable user sets

Applications

The Manta G-201B/C is a robust and low cost industrial GigE Vision camera. Thanks to its flexibility, it can be used for a variety of applications. On request, board level versions with separate sensor head (up to 200 mm distance to camera mainboard) are available. The Manta incorporates three LUTs (separate R, G, and B control), color correction, and many more features.

Typical applications:

- Machine vision
- ITS (Intelligent Traffic Solutions)
- Entertainment and multimedia applications
- 3D applications
- ITS (Intelligent traffic solutions)
- ... and many more