



Description

GigE Vision camera, Sony ICX414, PoE option

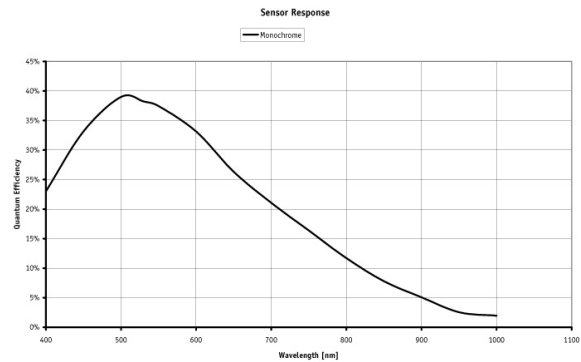
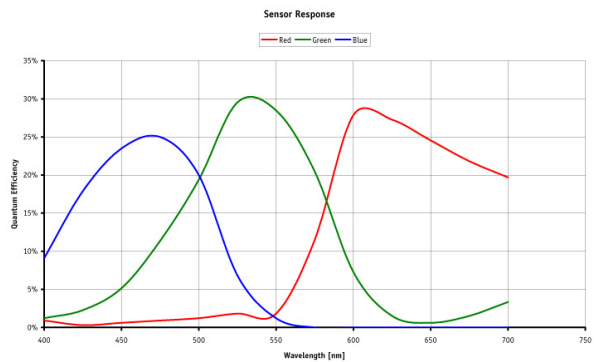
The Manta G-033B/C is a VGA GigE Vision camera with the Sony ICX414 CCD sensor. It runs at 88 fps (full resolution). With a smaller ROI, higher frame rates are possible. It incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options like angled 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 ICX414 (type 1/2), 0.3 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
 - White medical housing
 - **NEW: PoE (Power over Ethernet)**

Specifications

Manta		G-033	
Interface	IEEE 802.3 1000baseT		
Resolution	656 x 492		
Sensor	Sony ICX414		
Type	CCD Progressive		
Sensor Size	Type 1/2		
Cell size	9.9 µm		
Lens mount	C/CS		
Max frame rate at full resolution	88 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 \(click here\)](#)



Smart features

- ROI (Region of Interest Readout)
- Exposure
 - Auto/one push/programmable
 - Exposure time 26 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 35 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-033B/C is a rich-featured, modular camera with GigE Vision interface and VGA resolution. Many options are available: PoE (Power over Ethernet), three separate look-up tables for R, G, and B, angled heads, or boardlevel versions with separate sensor head.

Typical applications:

- Machine vision
- Industrial inspection and automation
- Semiconductor inspection
- Logistics
- ITS/Traffic monitoring
- ... and many more