///ALLIED
Vision Technologies

SEEING IS BELIEVING

Manta
G-033

Description

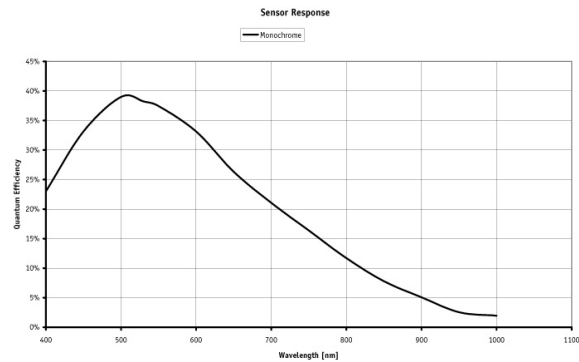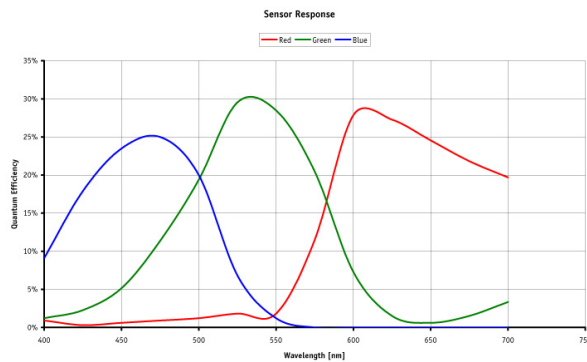### GigE Vision camera, Sony ICX414, VGA - NEW

The Manta G-033B/C is a VGA GigE Vision camera with the Sony ICX414 CCD sensor. It runs 88 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 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 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
    - White medical housing

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
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)

Sensor Response

Red —— Green —— Blue

Sensor Response

Monochrome

Smart features

- ROI (Region of Interest Readout)
- Exposure
  - Auto/manual
  - Exposure time 26 µs to 60 s
- White balance
  - Auto/manual
- Hue, saturation, sharpness (only color versions)
- Gain
  - Auto/manual
  - Manual gain control: 0 to 35 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-033B/C is a robust mainstream camera with GigE Vision interface and VGA resolution.

Typical applications:

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