



## Description

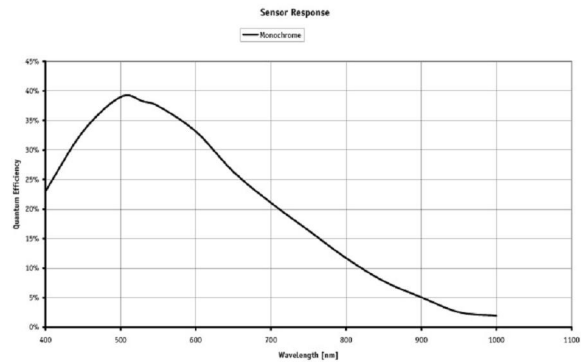
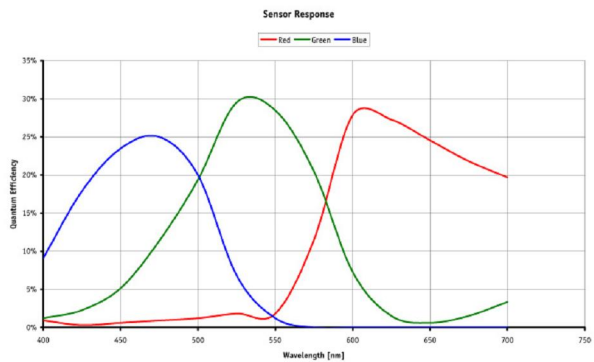
### GigE Vision camera, Sony ICX414, PoE option

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  $\mu$ 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

| <b>Manta G-033</b>                            |                                    |
|---|------------------------------------|
| <b>Interface</b>                              | IEEE 802.3 1000baseT               |
| <b>Resolution</b>                             | 656 x 492                          |
| <b>Sensor</b>                                 | Sony ICX414                        |
| <b>Type</b>                                   | CCD Progressive                    |
| <b>Sensor Size</b>                            | Type 1/2                           |
| <b>Cell size</b>                              | 9.9 μm                             |
| <b>Lens mount</b>                             | C/CS                               |
| <b>Max frame rate at full resolution</b>      | 88 fps                             |
| <b>A/D</b>                                    | 14 bit                             |
| <b>On-board FIFO</b>                          | 32 MB                              |
| <b>Output</b>                                 |                                    |
| <b>Bit depth</b>                              | 8-12 bit                           |
| <b>Mono modes</b>                             | Mono8, Mono16, Mono12 packed       |
| <b>Color modes YUV</b>                        | YUV411, YUV422, YUV444             |
| <b>Color modes RGB</b>                        | RGB24, BGR24                       |
| <b>Raw modes</b>                              | Bayer8, Bayer16, Bayer12 packed    |
| <b>General purpose inputs/outputs (GPIOs)</b> |                                    |
| <b>TTL I/Os</b>                               | 0                                  |
| <b>Opto-coupled I/Os</b>                      | 2 inputs, 2 outputs                |
| <b>RS-232</b>                                 | 1                                  |
| <b>Power/Mass/Dimensions/Regulations</b>      |                                    |
| <b>Power requirements (DC)</b>                | 8 V - 30 V                         |
| <b>Power consumption (12 V)</b>               | <3.6 W                             |
| <b>Mass</b>                                   | <200 g                             |
| <b>Body Dimensions (L x W x H in mm)</b>      | 86.4 x 44 x 29 mm incl. connectors |
| <b>Regulations</b>                            | CE, FCC Class B, RoHS              |



## Smart features

- ROI (Region of Interest Readout)
- Exposure
  - Auto/one push/programmable
  - Exposure time 26  $\mu$ 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