

## Manta

### G-033



- Versatile VGA camera
- PoE optional
- Angled head and boardlevel variants
- Video-iris lens control

## Description

GigE Vision camera, Sony ICX414, PoE option

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.

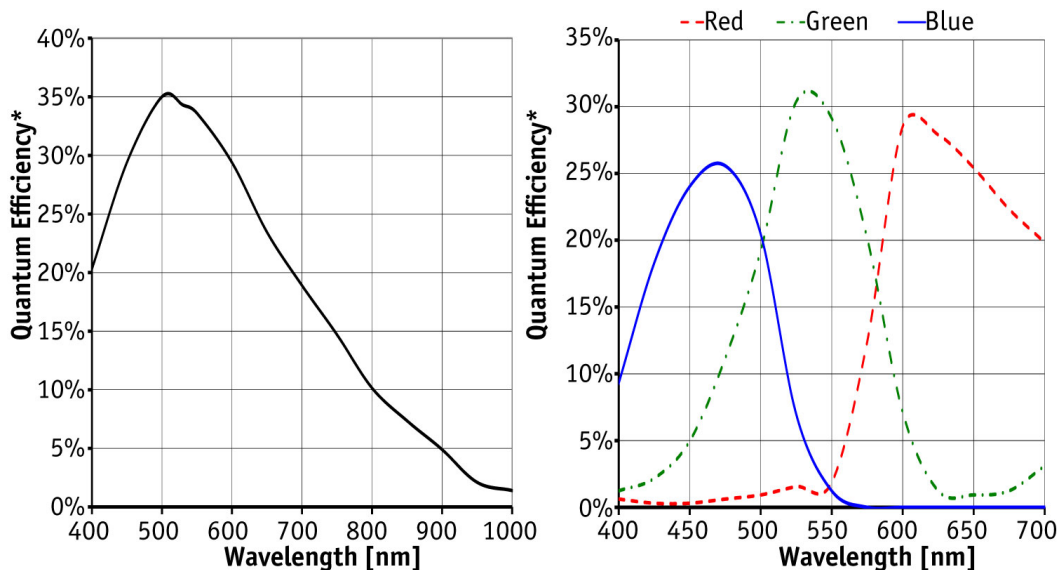
Options

- PoE (Power over Ethernet)
- Various IR cut/pass filters and lens mounts
- Angled head, board level version, white medical housing

## Specifications

Manta	G-033
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	656 × 492
Sensor	Sony ICX414
Sensor type	CCD Progressive
Sensor size	Type 1/2
Cell size	9.9 μm
Lens mount	C/CS-Mount
Max frame rate at full resolution	88 fps
ADC	12 bit
On-board FIFO	32 Mbyte
<b>Output</b>	
Bit depth	8-12 bit

Manta	G-033
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerRG8, BayerRG12, BayerRG12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	+5 °C ... +45 °C
Power requirements (DC)	PoE, or 8-30 VDC
Power consumption (@12 V)	4.2 W (PoE) / 3.6 W (non-PoE)
Mass	210 g (PoE) / 200 g (non-PoE)
Body dimensions (L × W × H in mm)	86.4 × 44 × 29 mm incl. connectors
Regulations	CE, FCC Class B, RoHS



\*QE measured without protection glass or filters. With glass or filters, quantum efficiency decreases by approximately 10%.

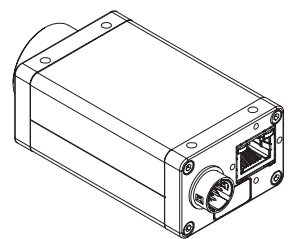
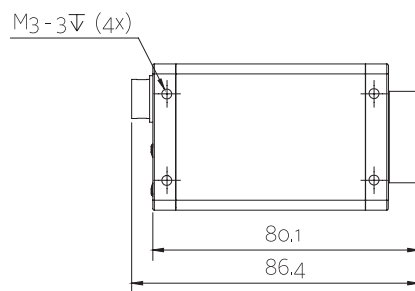
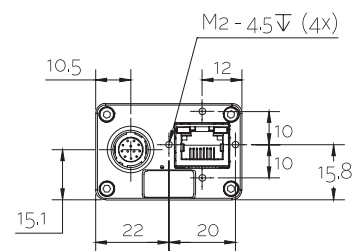
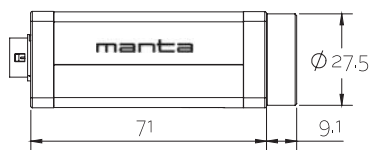
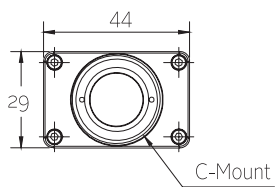
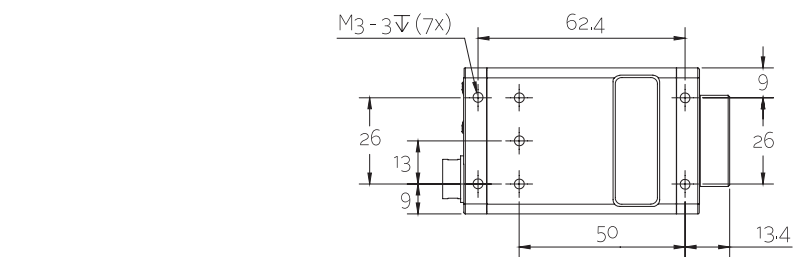
## Features

- Video-type auto iris
- ROI, separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 35 dB)



- Auto exposure (26  $\mu$ s to 60 s)
- Auto white balance
- LUTs (look-up tables)
- Gamma
- Hue, saturation, color correction
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Event channel
- Chunk data
- Storable user sets

## Technical drawing





## Applications

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