Allied Vision

GigE VISION

Manta
G-031

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

Description

Fast GigE camera with ICX618, 125 fps, with LUTs, PoE option

Manta G-031B/C is a fast GigE camera with the ICX618 sensor. This EXview HAD CCD sensor is very sensitive both in the visible spectrum and in the NIR (near-infrared) spectrum. At full resolution, this camera runs 125 fps. The camera incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options.
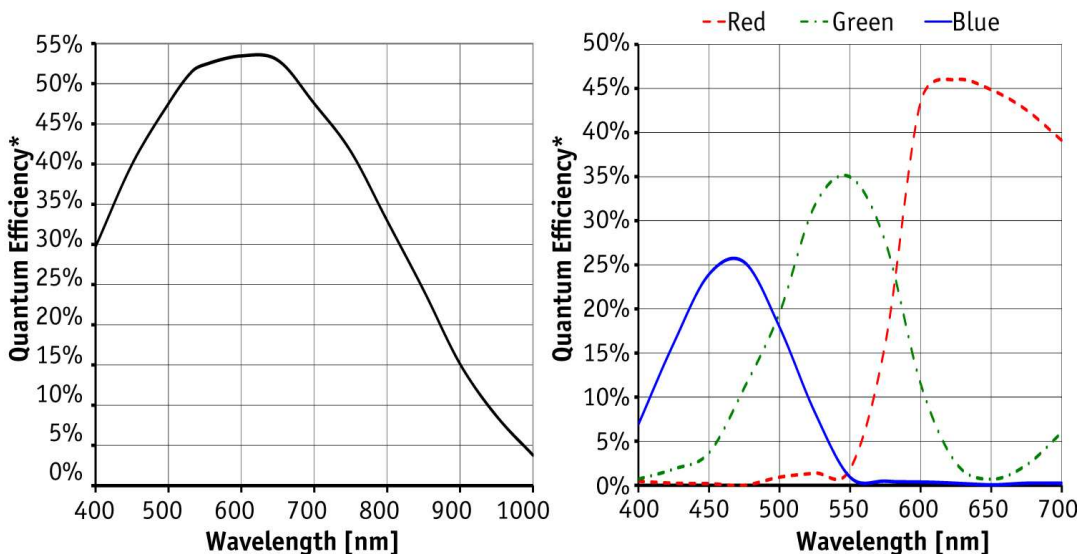Options

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

Specifications

Manta	G-031
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	656 × 492
Sensor	Sony ICX618
Sensor type	CCD Progressive
Sensor size	Type 1/4
Cell size	5.6 µm
Lens mount	C/CS-Mount
Max frame rate at full resolution	125 fps
ADC	12 bit
On-board FIFO	32 Mbyte
Output	
Bit depth	8-12 bit

Manta	G-031
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerRG8, BayerRG12Packed, BayerRG12
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
Operating conditions/dimensions	
Operating temperature	+5 °C … +45 °C
Power requirements (DC)	PoE, or 8-30 VDC
Power consumption (@12 V)	4.3 W (PoE) / 3.7 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%.
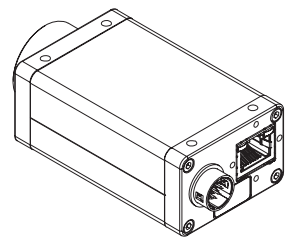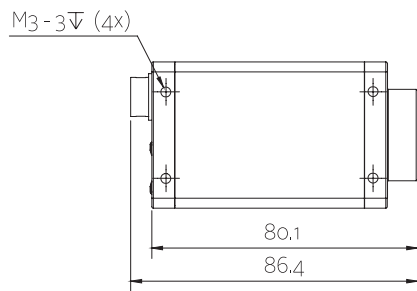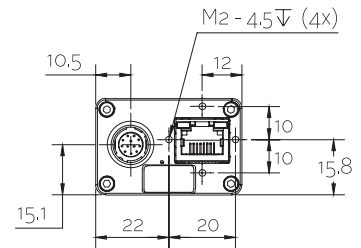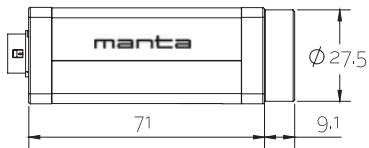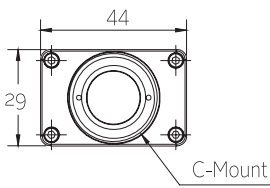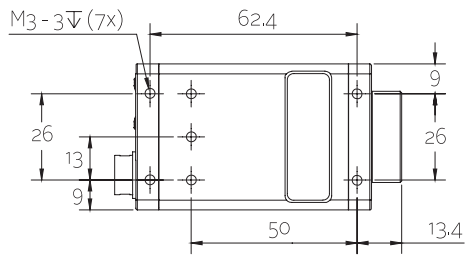
Features

- Video-type auto iris
- ROI, separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 32 dB)

- Auto exposure (58 µs 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

Allied Vision

Technical drawing

Applications

Manta G-031B/C is a fast and sensitive (also NIR sensitive) GigE camera. Its flexible modular options include PoE (Power over Ethernet).
Typical Applications:

- Machine vision
- Robotics
- Semiconductor inspection
- Logistics
- Security and Surveillance
- Pharmaceutical industry
- Food inspection
- ITS/Traffic monitoring