Allied Vision

# Manta
## G-032

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

## Description

Value packed Machine Vision camera, VGA, Sony ICX424, PoE option

Manta G-032B/C is a value packed GigE Vision camera with VGA resolution and a Sony ICX424 sensor. It runs at 80 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.
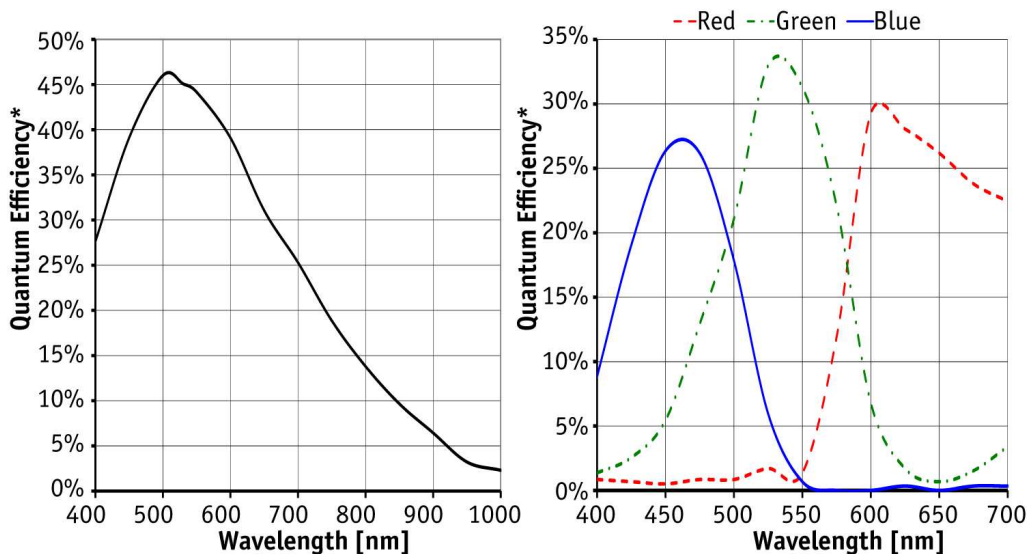Options

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

## Specifications

| Manta | G-032 |
|---|---|
| Interface | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional |
| Resolution | 656 × 492 |
| Sensor | Sony ICX424 |
| Sensor type | CCD Progressive |
| Sensor size | Type 1/3 |
| Cell size | 7.4 µm |
| Lens mount | C/CS-Mount |
| Max frame rate at full resolution | 80 fps |
| ADC | 12 bit |
| On-board FIFO | 32 Mbyte |
| **Output** | |
| Bit depth | 8-12 bit |

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| Manta | G-032 |
|---|---|
| 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) | 4.2 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%.
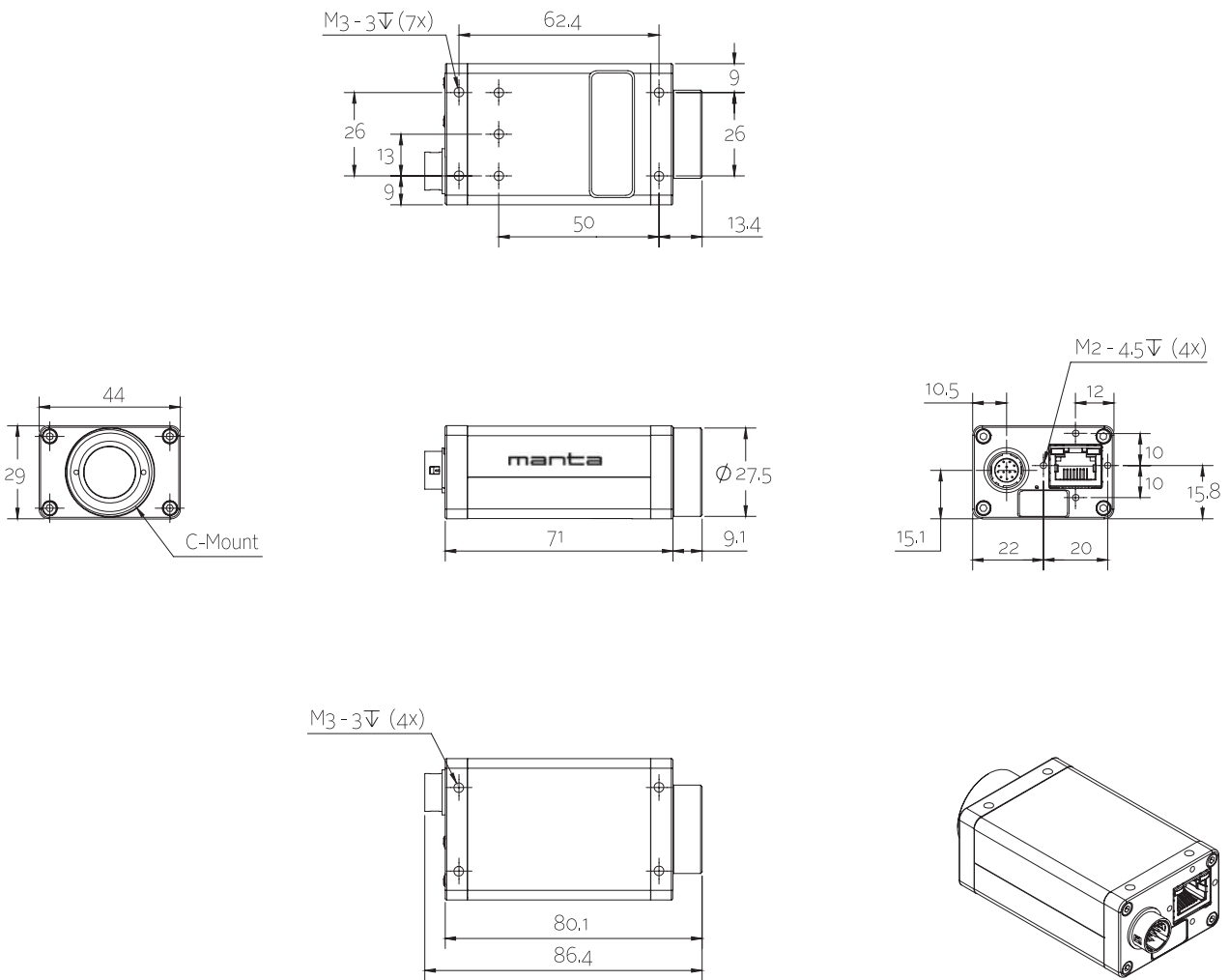
## Features

- Video-type auto iris
- ROI, separate ROI for auto features
- Binning
- Auto gain (manual gain control: 0 to 36 dB)
- Auto exposure (26 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-032B/C is a flexible, value packed VGA GigE Vision PoE camera

for a variety of machine vision and inspection applications. On request, board level versions with separate sensor head (up to 200 mm distance to camera mainboard) are available. The Manta incorporates three LUTs (separate R, G, and B control), color correction, and many more features.

- Semiconductor inspection
- Food inspection
- Printing marks control
- Pharmaceutical inspection
- Ophthalmology
- Machine vision
- ITS/Traffic monitoring
- ... and many more