



- PoE option
- Auto iris
- Angled head option
- Board level option

Simplify your setup of multi-camera applications

## Modular machine vision camera with GigE Vision interface

Manta G-504 with Sony ICX655 runs 9.2 frames per second at 5.0 MP resolution.

Manta is Allied Vision's most versatile GigE Vision camera series. It provides the largest choice of image sensors and its advanced feature set simplifies the setup of multi-camera applications. With its modular hardware concept, Manta offers nearly endless configuration possibilities to adapt the camera to your application.

Easy software integration with Allied Vision's **Vimba Suite** and compatibility to the most popular **third party image-processing libraries**.

See the **Modular Concept** for lens mount, housing variants, optical filters, case design, and other modular options. See the **Customization and OEM Solutions** webpage for additional options.

## Specifications

<b>Manta G-504</b>	
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	2452 (H) × 2056 (V)
Sensor	Sony ICX655
Sensor type	CCD Progressive
Shutter mode	Global shutter
Sensor size	Type 2/3
Pixel size	3.45 μm × 3.45 μm
Lens mounts (available)	C-Mount, CS-Mount

## Manta G-504

Max. frame rate at full resolution 9.2 fps

ADC 12 Bit

Image buffer (RAM) 32 MByte

### Imaging performance

Imaging performance data is based on the evaluation methods in the EMVA 1288 Release 3.1 standard for characterization of image sensors and cameras. Measurements are typical values for monochrome models measured at full resolution without optical filter. Contact Sales or AE for more information.

Quantum efficiency at 529 nm 57 %

Temporal dark noise 13.5 e<sup>-</sup>

Saturation capacity 6900 e<sup>-</sup>

Dynamic range 53.9 dB

Absolute sensitivity threshold 14.0 e<sup>-</sup>

### Output

Bit depth 8/12 Bit

Monochrome pixel formats Mono8, Mono12, Mono12Packed

YUV color pixel formats YUV411Packed, YUV422Packed, YUV444Packed

RGB color pixel formats RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed

Raw pixel formats BayerGB8, BayerGB12, BayerGB12Packed

### General purpose inputs/outputs (GPIOs)

Opto-isolated I/Os 2 inputs, 2 outputs

RS232 1

### Operating conditions/dimensions

Operating temperature +5 °C to +45 °C ambient (without condensation)

Power requirements (DC) 8 to 30 VDC AUX or IEEE 802.3af PoE

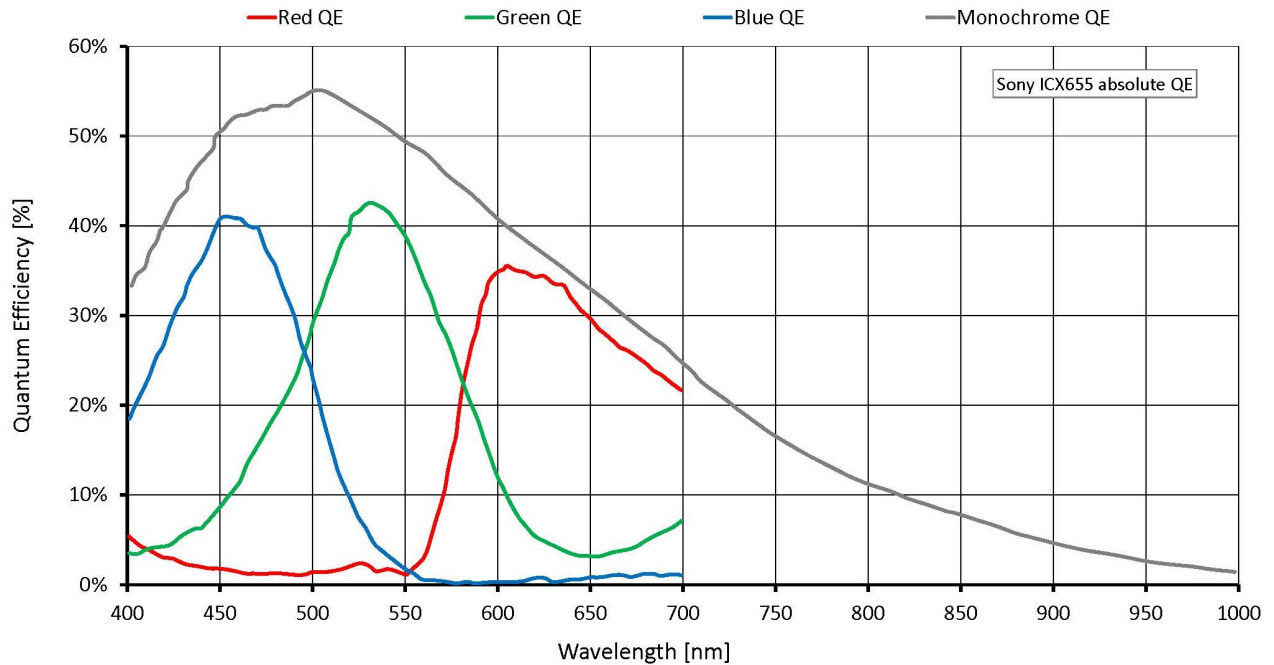
Power consumption External power: 3.9 W at 12 VDC | Power over Ethernet: 4.6 W

Mass 200 g; 210 g (PoE)

Body dimensions (L × W × H in mm) 86.4 × 44 × 29 (including connectors)

Regulations CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B; CAN ICES-3 (B)

## Quantum efficiency



## Features

### Image control: Auto

- Auto exposure
- Auto gain
- Auto white balance (color models)

### Image control: Other

- Binning
- Black level
- Color transformation (incl. hue, saturation; color models)
- Decimation
- Gamma
- LUT (look-up table)

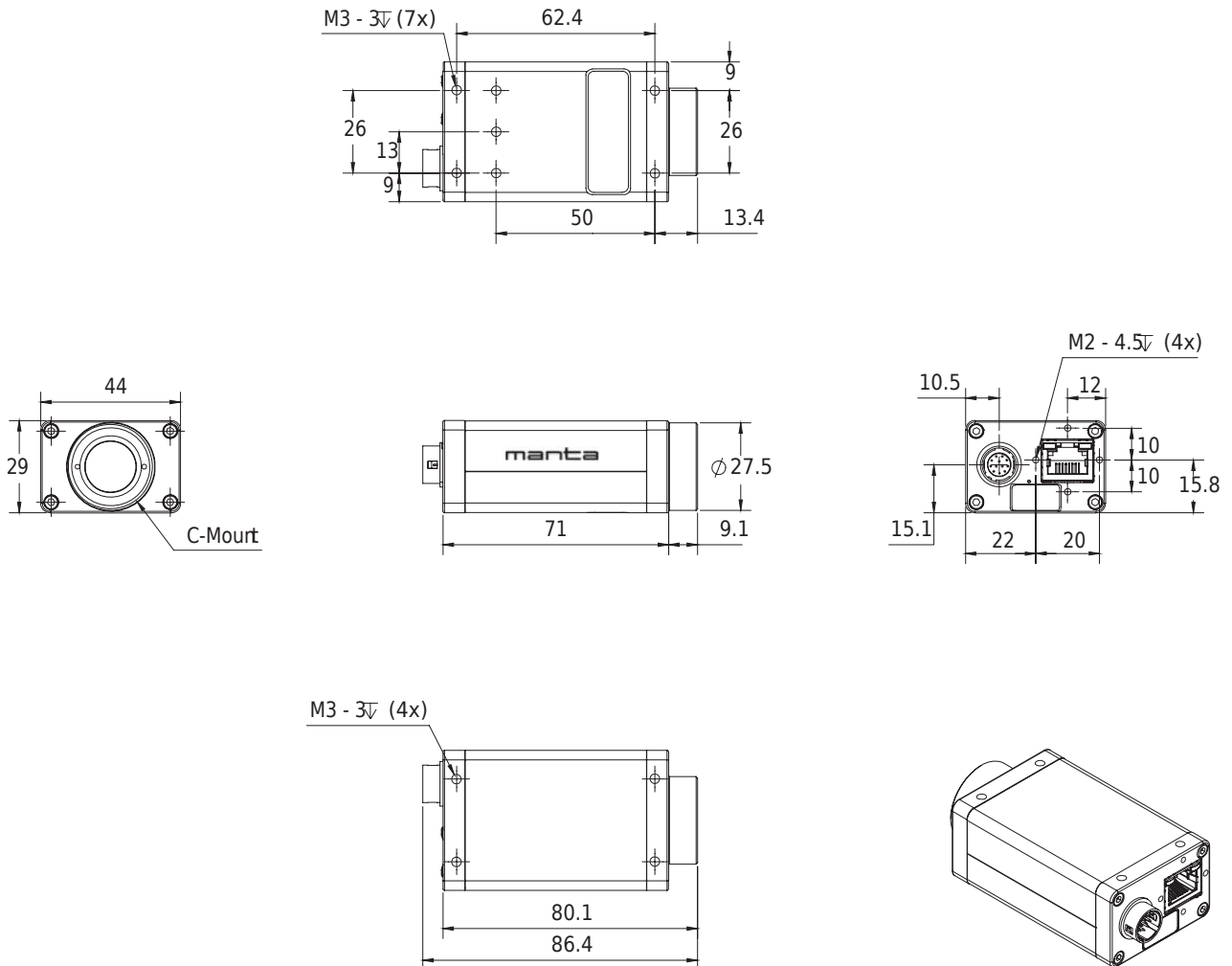


- Reverse X
- ROI (region of interest)

## Camera control

- Acquisition frame rate
- Auto iris
- Bandwidth control
- Event channel
- Firmware update in the field
- I/O and trigger control
- Image chunk data
- Stream hold
- User sets

## Technical drawing



## Applications

Manta G-504 is ideal for a wide range of applications including:

- Industrial inspection with high resolution
- Automation
- Logistics
- Science and research
- Healthcare and medical
- Intelligent traffic solutions (ITS)