Allied Vision

Manta
G-201-30fps

- 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-201-30fps with Sony ICX274 runs 30.0 frames per second at 2.0 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

Manta G-201-30fps	
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1624 (H) × 1234 (V)
Sensor	Sony ICX274
Sensor type	CCD Progressive
Shutter mode	Global shutter
Sensor size	Type 1/1.8
Pixel size	4.4 µm × 4.4 µm
Lens mounts (available)	C-Mount, CS-Mount, S-Mount

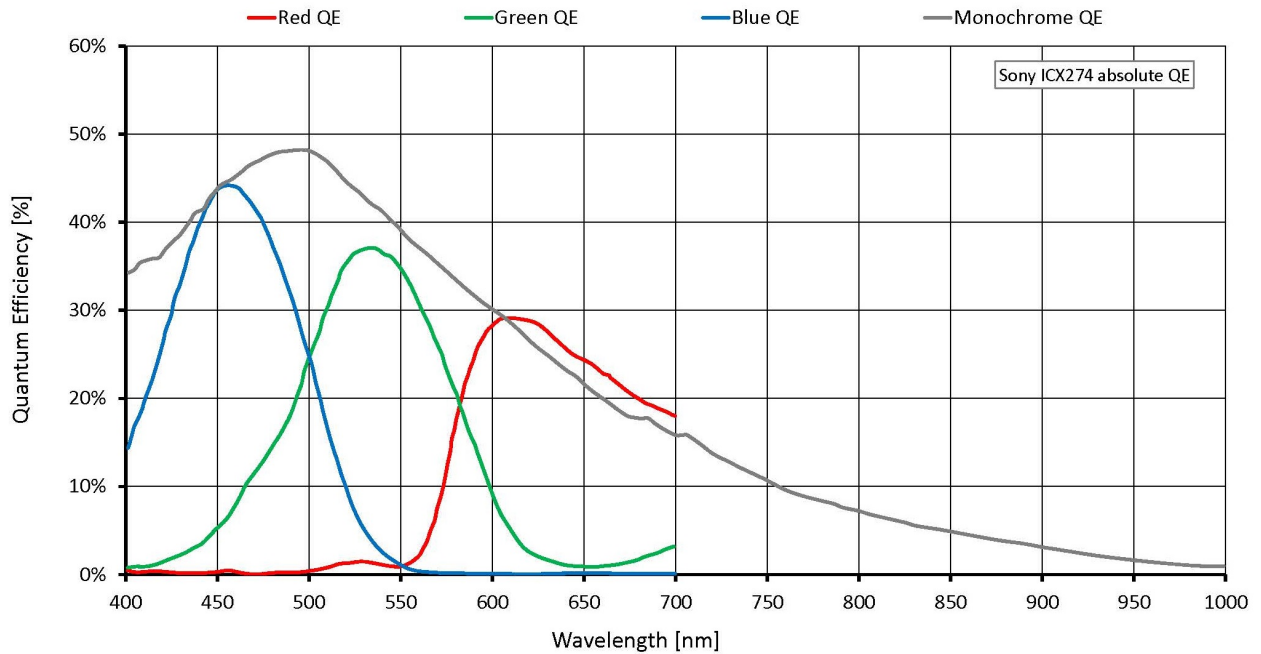| Manta G-201-30fps	
Max. frame rate at full resolution	30 fps
ADC	12 Bit
Image buffer (RAM)	32 MByte
Imaging performance	
Imaging performance data is based on the evaluation methods in the EMVA 1288 Release 3.1 standard for characterization of image sensors and cameras. Measurements are typical values for monochrome models measured at full resolution without optical filter. Contact Sales or AE for more information.	
Quantum efficiency at 529 nm	59 %
Temporal dark noise	11.9 e^-
Saturation capacity	9300 e^-
Dynamic range	57.5 dB
Absolute sensitivity threshold	12.4 e^-
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
Raw pixel formats	BayerRG8, BayerRG12Packed, BayerRG12
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: 4.6 W at 12 VDC	Power over Ethernet: 5.4 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)
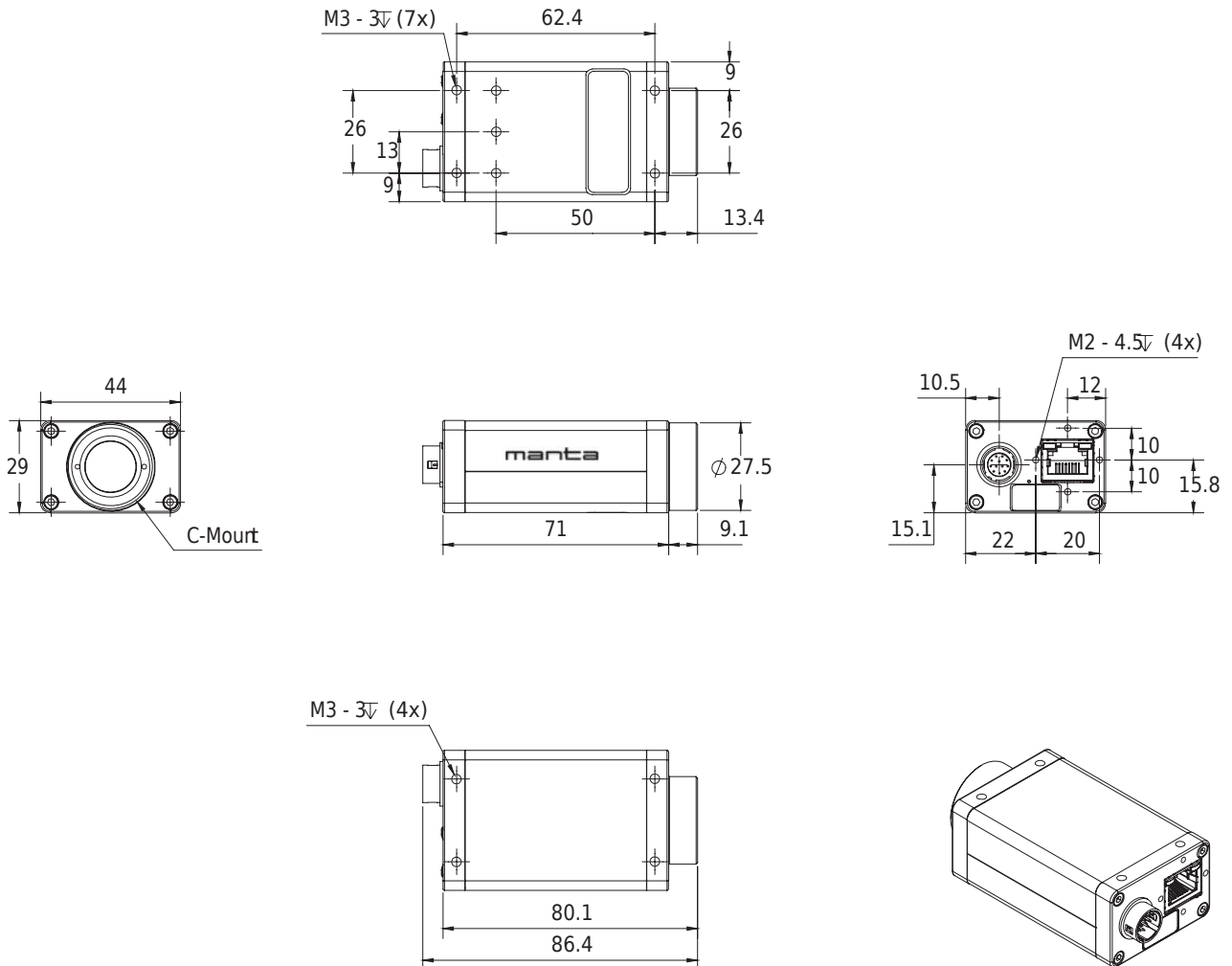- Decimation
- Gamma
- LUT (look-up table)
- Reverse X

- ROI (region of interest)

Camera control

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

Technical drawing

M3 - 3 (7x)   62.4   9   26
26   50   13   9   13.4

44   29   C-Mount

manta   ⌀27.5
71   9.1

M2 - 4.5 (4x)
10.5   12   10   10   15.8
15.1   22   20

M3 - 3 (4x)
80.1
86.4

Applications

Manta G-201-30fps is ideal for a wide range of applications including:

- Machine vision
- Entertainment and multimedia applications
- 3D applications
- Intelligent traffic solutions (ITS)