







- 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 with Sony ICX274 runs 14.0 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

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	GS (Global shutter)
Sensor size	Туре 1/1.8
Pixel size	4.4 μm × 4.4 μm
Lens mounts (available)	C-Mount, CS-Mount
Max. frame rate at full resolution	14 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	48 %
Temporal dark noise	8.9 e [−]
Saturation capacity	6900 e ⁻
Dynamic range	57.3 dB
Absolute sensitivity threshold	19.7 e ⁻

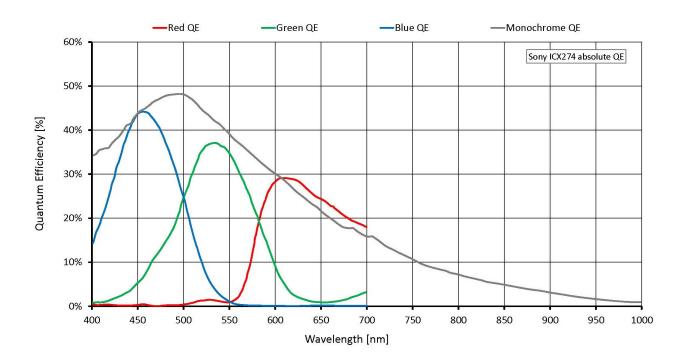
Output	
Bit depth	8/12 Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed
YUV color pixel formats	YUV411Packed, YUV422Packed, YUV444Packed
RGB color pixel formats	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw pixel formats	BayerRG8, BayerRG12Packed, BayerRG12



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: 3.6 W at 12 VDC Power over Ethernet: 4.2 W	
Mass	200 g; 210 g (PoE)	

Body dimensions (L × W × H in mm) 86.3 × 44 × 29 (including connectors)

Quantum efficiency





Features

Image control: Auto

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

Image control: Other

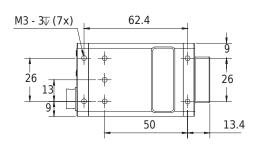
- Binning
- Black level
- Color transformation (incl. hue, saturation; color models)
- Decimation
- Gamma
- LUT (look-up table)
- Reverse X
- ROI (region of interest)

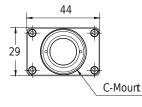
Camera control

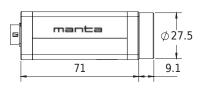
- Acquisition frame rate
- Auo iris
- Bandwidth control
- Event channel
- Firmware update in the field
- I/O and trigger control
- Image chunk data
- Stream hold
- User sets

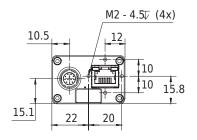


Technical drawing

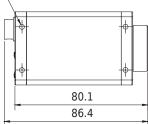


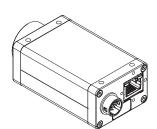












Applications

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

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