Allied Vision

// Manta G-2460
// Manta G-2040
// Manta G-1620

4th Generation Sony Pregius S Cameras

Key Specifications

Model	Sensor	Sensor type	Sensor size	Pixel size	Resolution	Frame rate	Lens mounts
Manta G-2460	Sony IMX540		Type 1.2		24.6 MP 5328 (H) × 4608 (V)	4.9 fps	
Manta G-2040	Sony IMX541	CMOS Global shutter	Type 1.1	2.74 µm x 2.74 µm	20.4 MP 4512 (H) × 4512 (V)	5.9 fps	C, CS
Manta G-1620	Sony IMX542		Type 1.1		16.2 MP 5328 (H) × 3040 (V)	7.4 fps	

Featuring backside illuminated Sony Pregius S CMOS sensors with a smaller pixel size, the new Manta cameras leverage your high-resolution imaging systems to the next-level. With resolutions up to 24.6 MP, versatile high-definition imaging applications with demanding requirements for illumination and design-in flexibility can be addressed.

The new CMOS models offer several advantages over existing high-resolution CCD and CMOS cameras, including: high quantum efficiency, dynamic range, and spatial resolution as well as lower readout noise resulting in outstanding imaging performance. The wider angle of incidence improves light collection and provides excellent images even in extremely low light conditions, minimizing lighting efforts. Moreover, shorter focal length lenses can be used without sensor shading.

Integrating cameras into your vision system is eased by multiple mounting options and a comprehensive GenICam compliant feature set. Cabling efforts and costs can be reduced by powering and triggering the device via a single Ethernet cable. Multiple cameras can be synchronized precisely by using the PTP feature. Lockable connectors ensure secure operation in high vibration environments.

Highlights

// Power over Ethernet (PoE, optional)

// Various filter options

// Board-level and angular housing options

// Very short minimum exposure time (4 µs)

// Decimation X/Y and binning

// Look-up table, color and gamma correction

// IEEE 1588 Precision Time Protocol (PTP)

// Trigger over Ethernet (ToE) via Action Commands

Technical Drawing

C-Mount
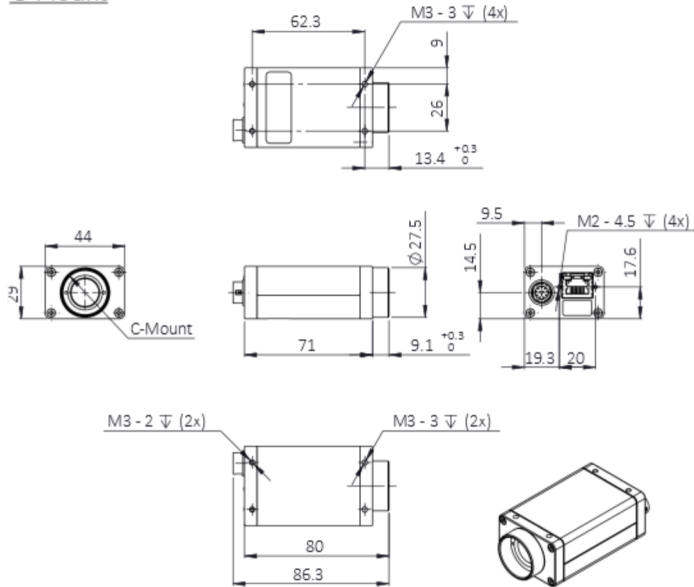
Absolute Quantum Efficiency

Sony IMX540, IMX541, IMX542 absolute QE

- Blue QE
- Green QE
- Red QE
- Monochrome QE
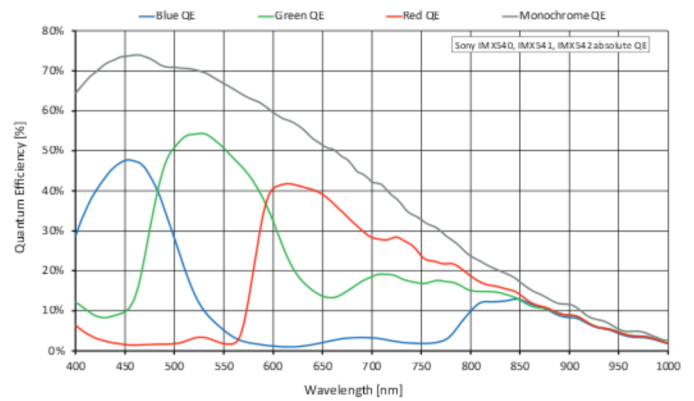
Applications

// <u>Industrial inspection</u> including mobile display inspection, AR/VR display measurement, surface inspection, semiconductor packaging inspection, print inspection, 2D/3D metrology, laser beam profiling, and automated optical inspection (AOI)

// <u>Digital archiving</u> of documents and and films

// <u>Medical and life sciences</u> applications including lab and biomedical imaging, pharma and cosmetic inspection, track and trace applications

// <u>Security and surveillance</u>, aerial imaging, and remote sensing

Our All-around Offering

At Allied Vision, you get more than just a great camera. We help you find the best imaging solution for your application. Our selected accessories, such as optics and cables, ensure optimal performance. Our powerful Vimba Software Development Kit (SDK) makes the camera integration easy whatever platform you use. And our technical support experts are at your side during system integration and for the whole lifetime of your cameras.

Contact us! We will be pleased to advise you.

// Save time atnd costs through easy integration into various machine vision applications

// Benefit from the latest state-of-the-art sensor technologies

// Rely on high-performance and stability

// Enjoy the benefits of our platform-independent Vimba SDK for full compatibility with all popular image processing libraries

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