



- Sony IMX542 CMOS sensor
- Power over Ethernet option
- Angled-head and board level variants
- Video-iris lens control

简化多相机应用设置

## 搭载千兆网接口的模块化机器视觉相机

Manta G-1620 搭载 Sony IMX542 传感器，在 7.4MP 分辨率下速度可达 16.2 帧/秒。

Manta 是 Allied Vision 用途最广泛的千兆网口相机系列。该系列相机可提供最丰富的图像传感器选项，并且凭借先进的功能组合简化了多相机应用设置。模块化硬件概念更是让 Manta 相机可提供近乎无限的配置选择，以灵活满足各种应用的需求。

Easy software integration with Allied Vision's [Vimba Suite](#) and compatibility to the most popular [third party image-processing libraries](#).

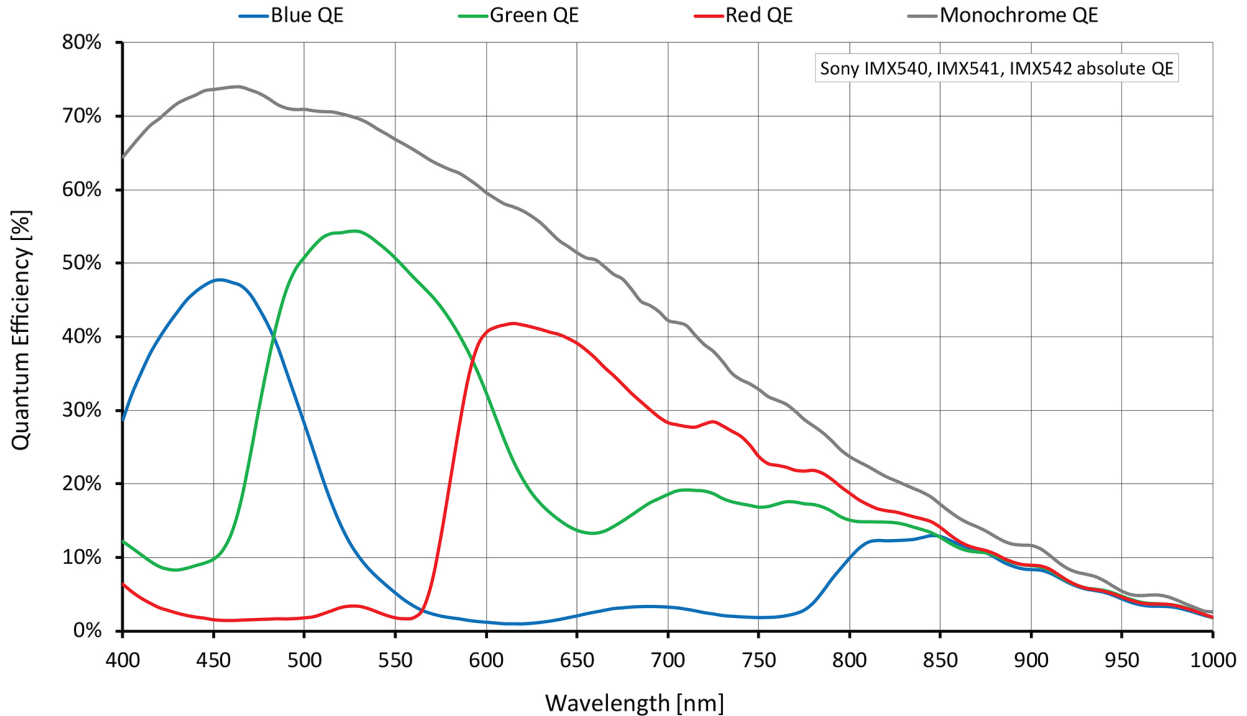
See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options. See the [Customization and OEM Solutions](#) webpage for additional options.

## 性能参数

Manta G-1620	
接口	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
分辨率	5328 (H) × 3040 (V)
Spectral range	300 to 1100 nm
传感器	Sony IMX542
传感器类型	CMOS
快门种类	Global shutter
传感器尺寸	Type 1.1
像元尺寸	2.74 μm × 2.74 μm

<b>Manta G-1620</b>	
Lens mounts (available)	C-Mount, CS-Mount, S-Mount
最大满帧帧率	7.4 fps
ADC	12 Bit
缓存 (RAM)	128 MByte
<b>成像性能</b>	
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.	
在波长为 529nm 下, 量子转换效率	69 %
暗噪声	2.2 e <sup>-</sup>
饱和电子数	9500 e <sup>-</sup>
动态范围	70.7 dB
绝对灵敏度阈值	2.8 e <sup>-</sup>
<b>输出</b>	
Bit 位数	8/12 Bit
黑白像素格式	Mono8, Mono12Packed, Mono12
YUV 彩色像素格式	YUV411Packed, YUV422Packed, YUV444Packed
RGB 彩色像素格式	RGB8Packed, BGR8Packed
原始像素格式	BayerRG8, BayerRG12, BayerRG12Packed
<b>通用输入输出 (GPIOs)</b>	
光耦 I/Os	2 inputs, 2 outputs
RS232	1
<b>工作条件/尺寸</b>	
工作温度	+5 °C to +45 °C ambient (without condensation)
电源要求 (DC)	8 to 30 VDC AUX or IEEE 802.3af PoE
功耗	External power: 3.3 W at 12 VDC   Power over Ethernet: 3.9 W
重量	190 g; 200 g (PoE)
尺寸 (L × W × H in mm)	86.3 × 44 × 29 (including connectors)
符合规范	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B; CAN ICES-3 (B)

## 量子转换效率



## 特性

Image optimization features:

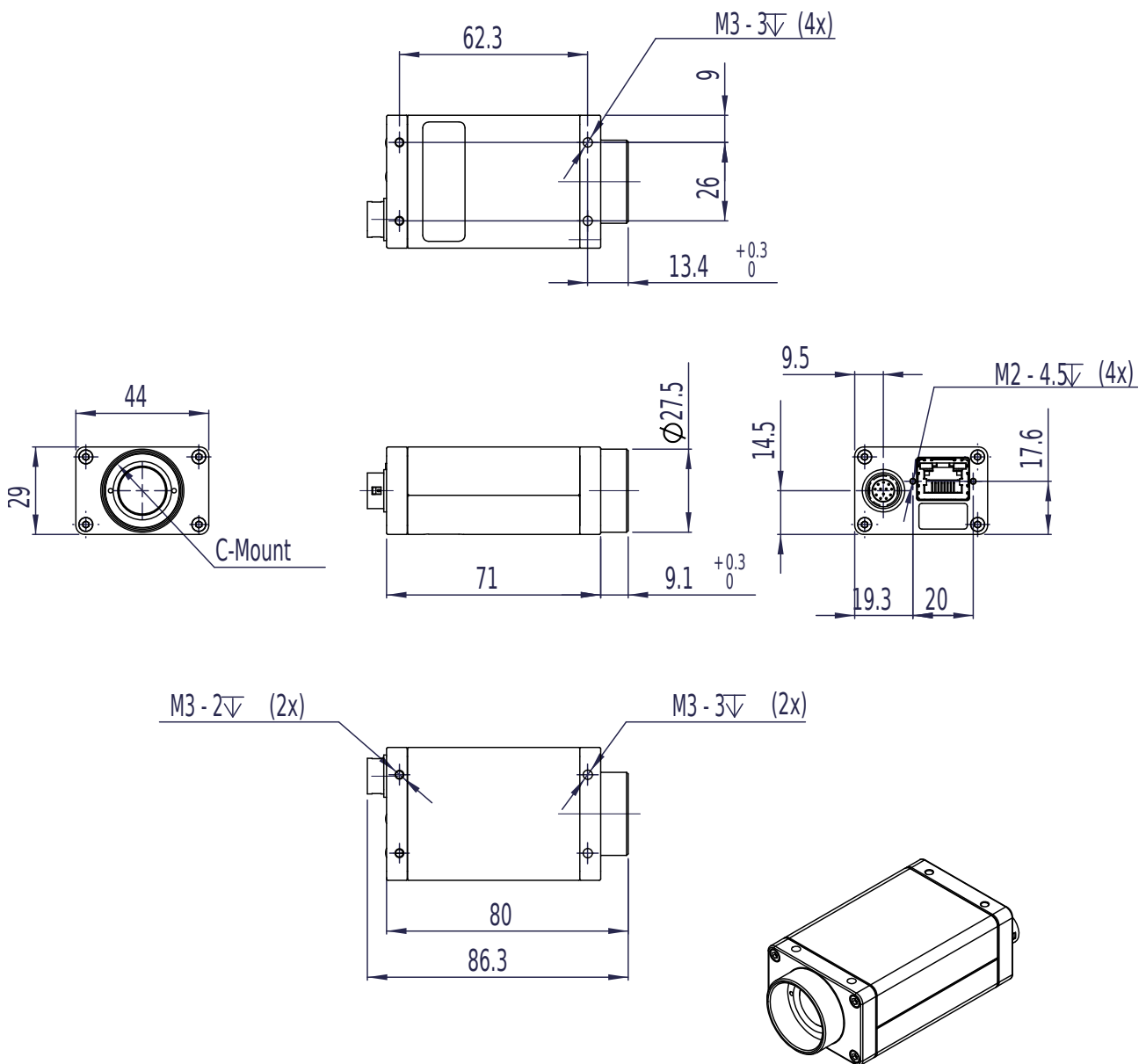
- Auto gain (manual gain control: 0 to 40 dB; 0.1 dB increments)
- Auto exposure (exposure time control: 4  $\mu$ s to 171.8 s; 1  $\mu$ s increments)
- Auto white balance (G-1620C only)
- Binning
- Black level (offset)
- Color correction, hue, saturation (G-1620C only)
- Decimation
- Defect pixel masking (user defined with Defect Mask Loader tool)
- Gamma correction
- Contrast enhancement via look-up table
- Region of interest, separate region for auto features

- Reverse X/Y

## Camera control features:

- Auto-iris (video type)
- Event channel
- Image chunk data
- IEEE 1588 Precision Time Protocol
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring (main board)
- Trigger over Ethernet Action Commands

## 外形尺寸



## 应用场景

Manta G-1620 is ideal for a wide range of applications including:

- Machine Vision
- Broadcast analysis requiring Full HD such as sports analytics



- Industrial inspection
- Security and surveillance
- Intelligent traffic solutions (ITS) including traffic monitoring, speed enforcement, and toll collection
- Low light or high sensitivity conditions
- Outdoor applications with dynamic lighting situations