

Prosilica GT 4907



- Versatile temperature range for extreme environments
- PTP
- PoE
- 7.5 fps @ 16 Megapixel

15.7 Megapixel machine vision camera for extreme environments

Prosilica GT4907 is a 15.7 Megapixel camera with a GigE Vision compliant Gigabit Ethernet port and Hirose I/O port. Prosilica GT4907 is offered in both monochrome and color models. This camera incorporates the high quality ON Semiconductor KAI-16070 TRUESENSE Gen 2 CCD sensor providing excellent monochrome and color image quality. At full resolution, this camera runs 7.6 frames per second. With a smaller region of interest, higher frame rates are possible. It is a rugged camera designed to operate in extreme environments. It is a large format housing camera with a F-Mount lens mount by default. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Benefits and features:

- Monochrome (GT4907) and color (GT4907C) models
- GigE Vision interface with Power over Ethernet
- Screw mount RJ45 Ethernet connector for secure operation in industrial environments
- Supports cable lengths up to 100 meters (CAT-5e or CAT-6)
- Trigger over Ethernet (ToE) Action Commands allow for a single cable solution to reduce system costs
- Comprehensive I/O functionality for simplified system integration
- Planarity adjustable (PA) EF Lens Mount (option -18) for electronic control of aperture and autofocus
- Easy camera mounting via standard M3 threads at all sides and 1/4-20 tripod mounting hole



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

性能参数

Prosilica GT	4907
接口	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
分辨率	4864 (H) × 3232 (V)
传感器	ON Semi KAI-16070
传感器类型	CCD Progressive
Shutter mode	Global shutter
传感器尺寸	Type 35 mm
像元尺寸	7.4 μm × 7.4 μm
Lens mounts (available)	F-Mount, F-Mount PA, M58-Mount, M58-Mount PA, EF-Mount PA, M42-Mount, M42-Mount PA
最大满帧帧率	7.6 fps
ADC	14 Bit
缓存 (RAM)	128 MByte
非易失性内存 (Flash)	1024 KByte (for selected models only)

成像性能

成像性能数据是基于欧洲机器视觉协会 (EMVA) 1288发布的3.1版图像传感器和像机特征描述标准中的评估方法。测量值是在没有光学滤波片的全分辨率下，测量单色模型的典型值。请联系销售或工程师了解更多信息。

在波长为529nm下，量子转换效率	46 %
暗噪声	18.1 e ⁻
饱和电子数	37200 e ⁻
动态范围	66.0 dB
绝对灵敏度阈值	18.6 e ⁻

输出

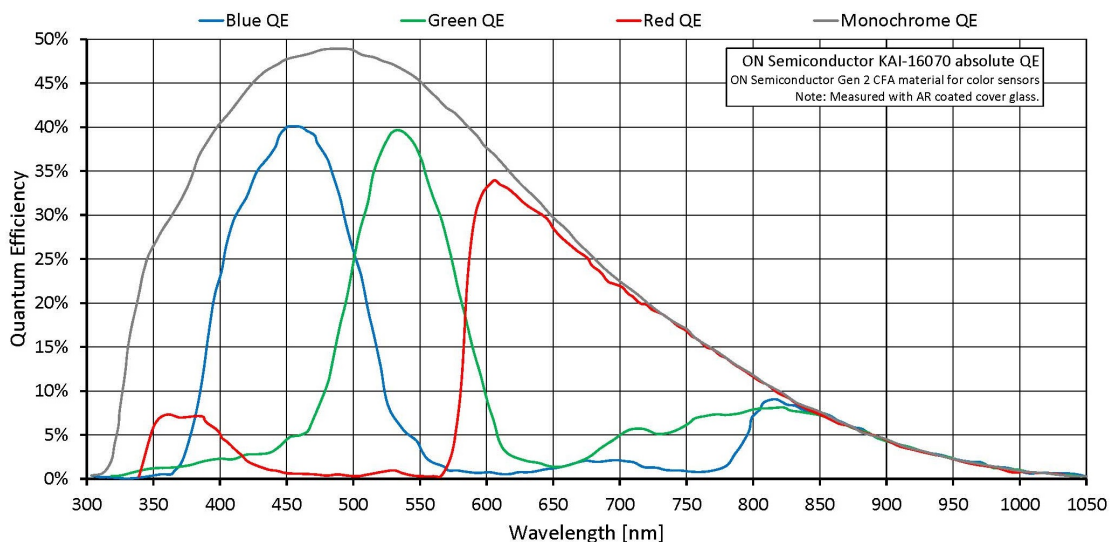
Bit位数	14 (mono) - 12 (color) Bit
黑白像素格式	Mono8, Mono12, Mono12Packed, Mono14
YUV彩色像素格式	YUV411Packed, YUV422Packed, YUV444Packed
RGB彩色像素格式	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
原始像素格式	BayerGR8, BayerGR12, BayerRG12Packed

通用输入输出(GPIOs)

TTL I/Os	1 input, 2 outputs
光耦 I/Os	1 input, 2 outputs
RS232	1

Prosilica GT	4907
	工作条件/尺寸
工作温度	-20 °C to +50 °C ambient (without condensation)
电源要求 (DC)	7 to 25 VDC AUX or IEEE 802.3at Type 1 PoE
功耗	External power: 7.7 W at 12 VDC Power over Ethernet: 9.5 W
重量	372 g
尺寸 (L × W × H in mm)	96 × 66 × 53.3 mm (including connectors)
符合规范	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003 Issue 4/5

量子转换效率



特性

Image optimization features:

- Auto gain (manual gain control: 0 to 32 dB)
- Auto exposure (manual exposure control: 35 μ s to 26.8 s)
- Auto white balance (GT4907C only)
- Binning (horizontal and vertical)
- Color correction, hue, saturation (GT4907C only)
- Column defect masking

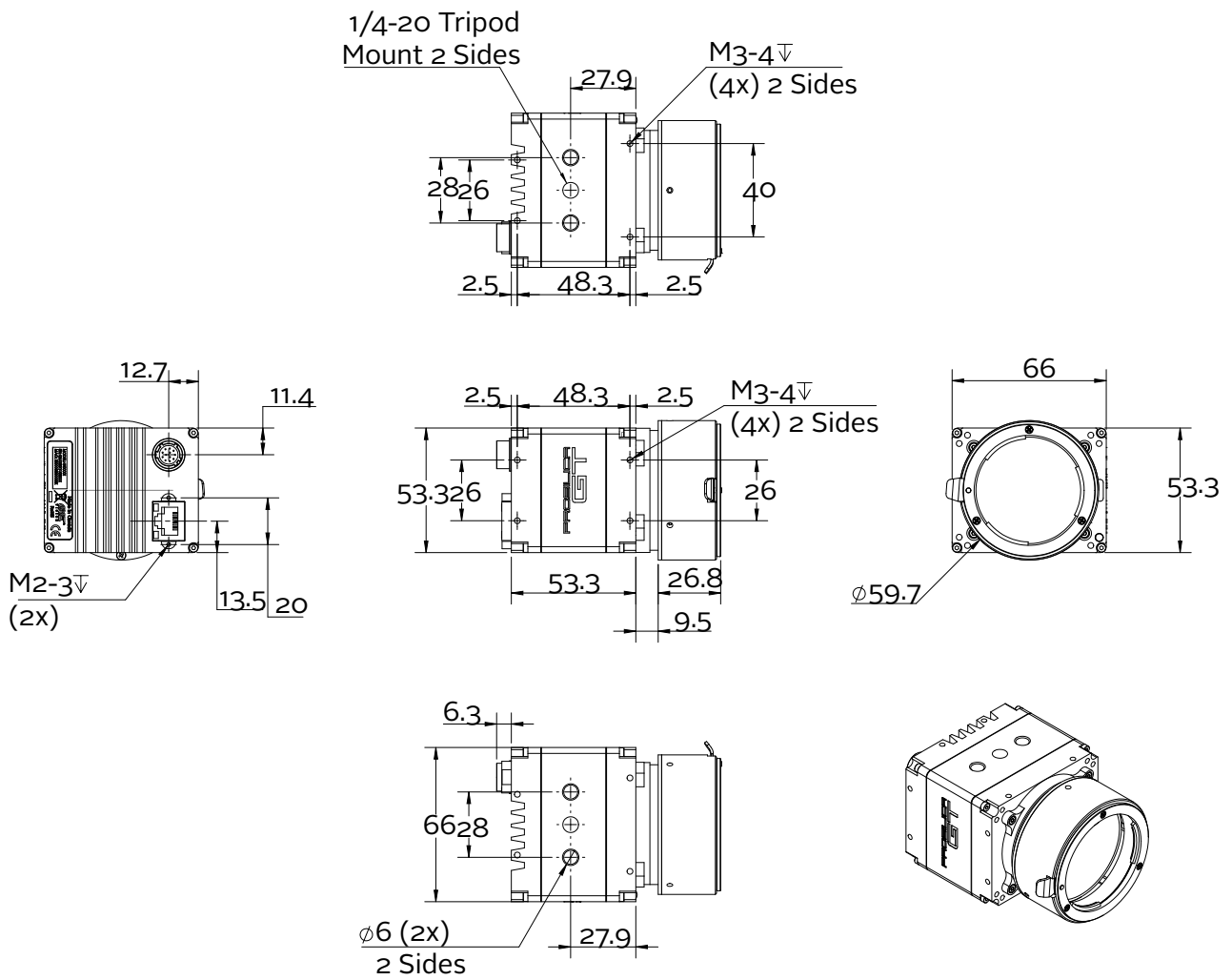


- Decimation X/Y
- Gamma correction
- Three look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features
- Reverse X/Y

Camera control features:

- EF lens control (order option -18)
- Event channel
- Image chunk data
- IEEE 1588 Precision Time Protocol (PTP)
- RS232
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Tap mode switchable in Vimba Viewer 2.0 or later (four-tap, one-tap)
- Temperature monitoring (main board and sensor board)
- Trigger over Ethernet (ToE) Action Commands
- Non-volatile memory 1024 KByte (for selected models only)

外形尺寸





应用场景

Prosilica GT4907 is ideal for a wide range of applications including:

- Outdoor imaging
- Traffic imaging and ITS
- Public security and surveillance
- Industrial inspection
- Machine vision
- Military and space applications