

Prosilica GT 5120



- Type APS-H CMOS sensor
- IEEE 1588 PTP
- Power over Ethernet
- 4.59 fps @ full resolution

26.2 Megapixel industrial camera for extended temperature ranges

Prosilica GT5120 is a 26.2 Megapixel camera with a GigE Vision compliant Gigabit Ethernet interface and Hirose port. Prosilica GT5120 is offered in monochrome and extended near-infrared (NIR) models. This camera incorporates the high quality ON Semiconductor PYTHON 25K CMOS sensor with In-pixel Correlated Double Sampling (IP-CDS) global shutter technology. At full resolution, this camera runs 4.59 frames per second. With a smaller region of interest, higher frame rates are possible. Prosilica GT5120 is a rugged camera with a robust thermal housing that is designed to operate in extended temperature ranges and fluctuating lighting conditions. It is a large format housing camera with a standard F-Mount lens mount. By default monochrome and NIR models ship with no optical filter.

Benefits and features:

- Monochrome (GT5120) and extended near-infrared (GT5120NIR) 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](#).
- Enhanced Defect Pixel Correction feature with a new Defective Pixel List Manager tool that allows you to load different user defined defective pixel lists to match your application and optimize the life cycle of the camera

Options:

- Available with F-Mount PA, M58-Mount, M58-Mount PA, EF-Mount PA, M42-Mount, M42-Mount PA
- Available with IRC30 IR cut filter, Schneider 486 IR cut filter, or B 270 protection glass

See the [Modular Concept](#) for lens mount and optical filters options. See the [Customization and OEM Solutions](#) page for additional options.

性能参数

| | |
|-------------------------|--|
| Prosilica GT | 5120 |
| 接口 | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
| 分辨率 | 5120 (H) × 5120 (V) |
| 传感器 | ON Semi PYTHON 25K |
| 传感器类型 | CMOS |
| Shutter mode | Global shutter |
| 传感器尺寸 | Type APS-H |
| 像元尺寸 | 4.5 μm × 4.5 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 | 4.59 fps |
| ADC | 10 Bit |
| 缓存 (RAM) | 128 MByte |
| 非易失性内存 (Flash) | 1024 KByte (for selected models only) |

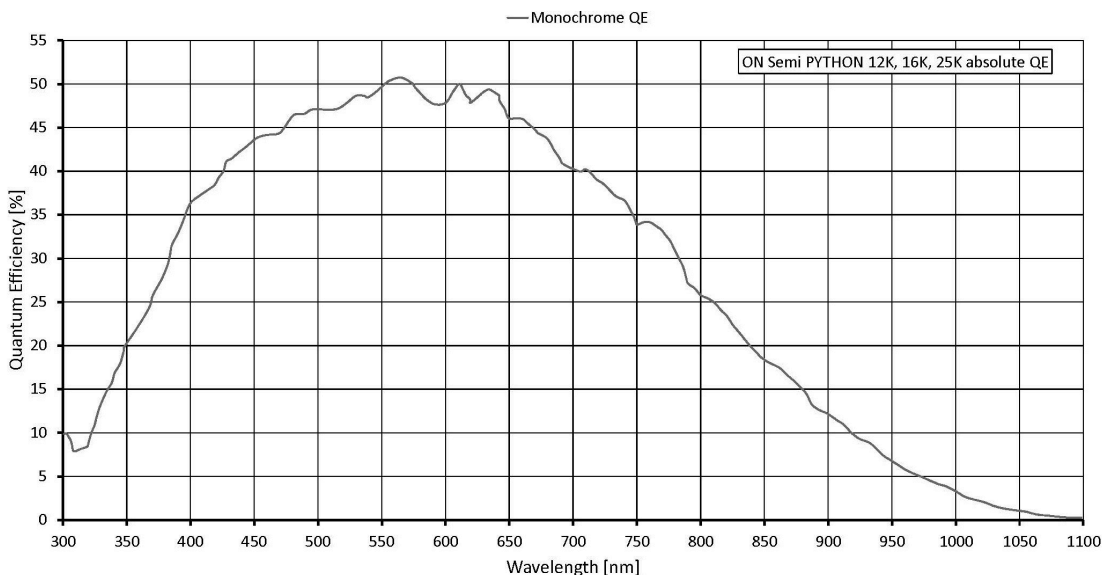
成像性能

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，测量单色模型的典型值。

| | |
|-------------------|---------------------|
| 在波长为529nm下，量子转换效率 | 53 % |
| 暗噪声 | 22.1 e ⁻ |
| 饱和电子数 | 7800 e ⁻ |

| | |
|----------------------|---|
| Prosilica GT | 5120 |
| 动态范围 | 50.7 dB |
| 绝对灵敏度阈值 | 22.7 e ⁻ |
| 输出 | |
| Bit位数 | 10 Bit |
| 黑白像素格式 | Mono8, Mono10 |
| 通用输入输出(GPIOs) | |
| TTL I/Os | 1 input, 2 outputs |
| 光耦 I/Os | 1 input, 2 outputs |
| RS232 | 1 |
| 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: 5.02 W at 12 VDC Power over Ethernet: 6.3 W |
| 重量 | 372 g |
| 尺寸 (L × W × H in mm) | 96 × 66 × 56.3 (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

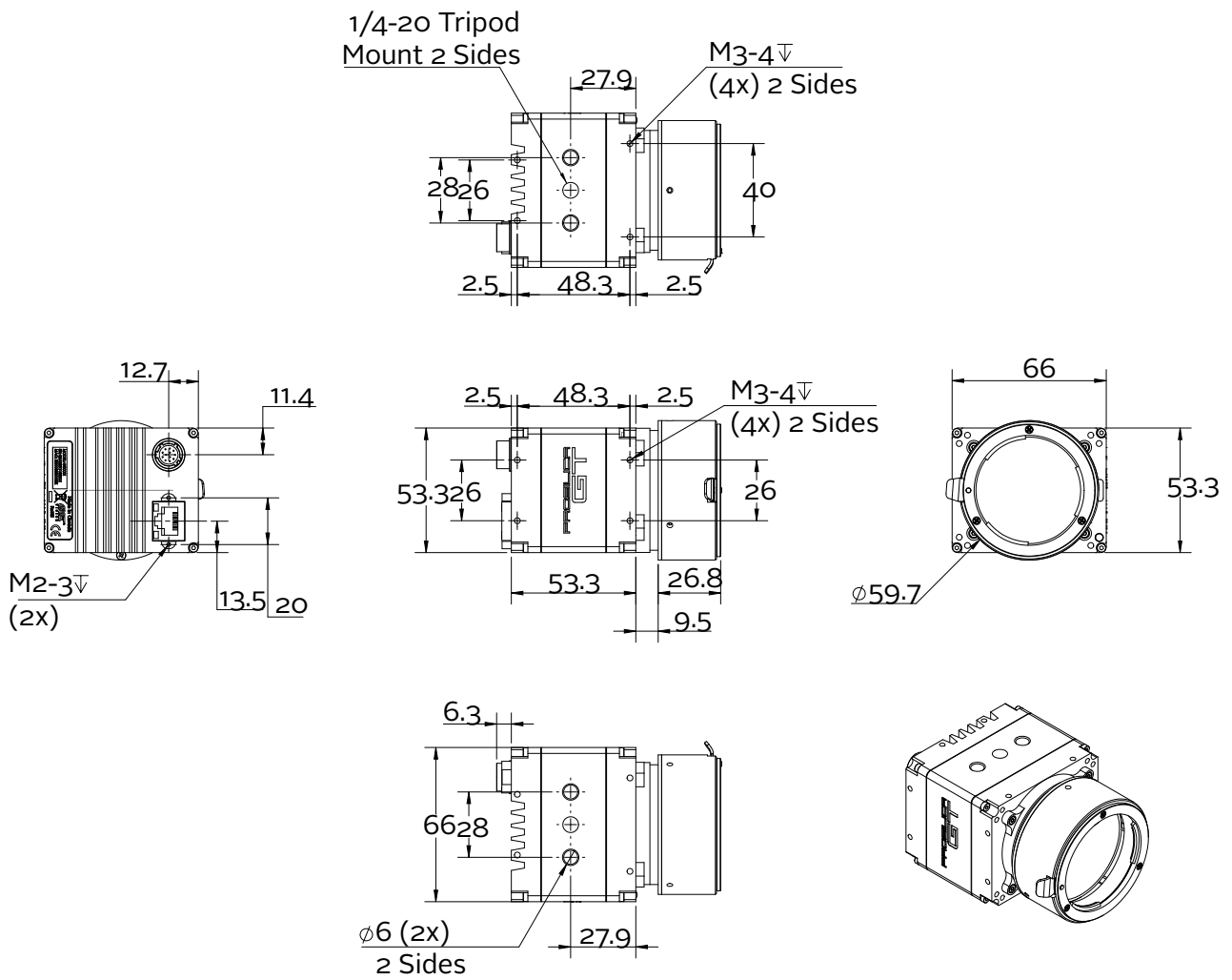
Image optimization features:

- Auto gain (manual gain control: 0 to 22 dB)
- Auto exposure (manual exposure control: 1 μ s to 1 s, 1 μ s increments)
- Binning (horizontal and vertical) (sum)
- Decimation X/Y
- Enhanced Defect Pixel Correction (DPC)
- Fixed Pattern Noise Correction (FPNC)
- Gamma correction
- Three look-up tables (LUTs)
- Region of interest (ROI)

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 (easy bandwidth control)
- Stream holdSync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- 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 GT5120 camera series is ideal for a wide range of applications including:

- Outdoor imaging
- Intelligent Traffic Systems (ITS)
- Public security and surveillance
- Industrial inspection (food, bottles, recycling, labels, etc.)
- Microscopy
- Military and space applications
- Medical and healthcare
- Other machine vision applications