

Prosilica GC 1600H



- Sony ICX274 CCD sensor
- 25 fps @ full resolution
- Rugged housing
- Video-type auto iris

GigE Vision, Sony ICX274 EXview CCD sensor, auto-iris, 25 fps

Prosilica GC1600H is a 2.0 Megapixel camera with a GigE Vision compliant Gigabit Ethernet interface and Hirose port. Prosilica GC1600H is offered in both monochrome and color models. This camera incorporates the high quality Type 1/1.8 (8.923 mm diagonal) Sony ICX274 CCD sensor with Super HAD CCD technology that provides superior image quality, excellent sensitivity, and low noise. At full resolution, this camera has a frame rate of 25 frames per second. With a smaller region of interest higher frame rates are possible. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Benefits and features:

- Monochrome (GC1600H) and color (GC1600CH) models
- GigE Vision interface
- Screw mount RJ45 Ethernet connector for industrial environments
- Supports cable lengths up to 100 meters (CAT-5e or CAT-6)
- Popular C-Mount lens mount
- Standard M3 mounting holes and optional tripod adapter
- Support for popular third party image-processing libraries including Cognex VisionPro, MathWorks MATLAB, and National Instruments LabVIEW

Options:

- CS-Mount
- Optical filters (IR cut filter/Protection glass)

See the [Modular Concept](#) for lens mount and optical filter options.

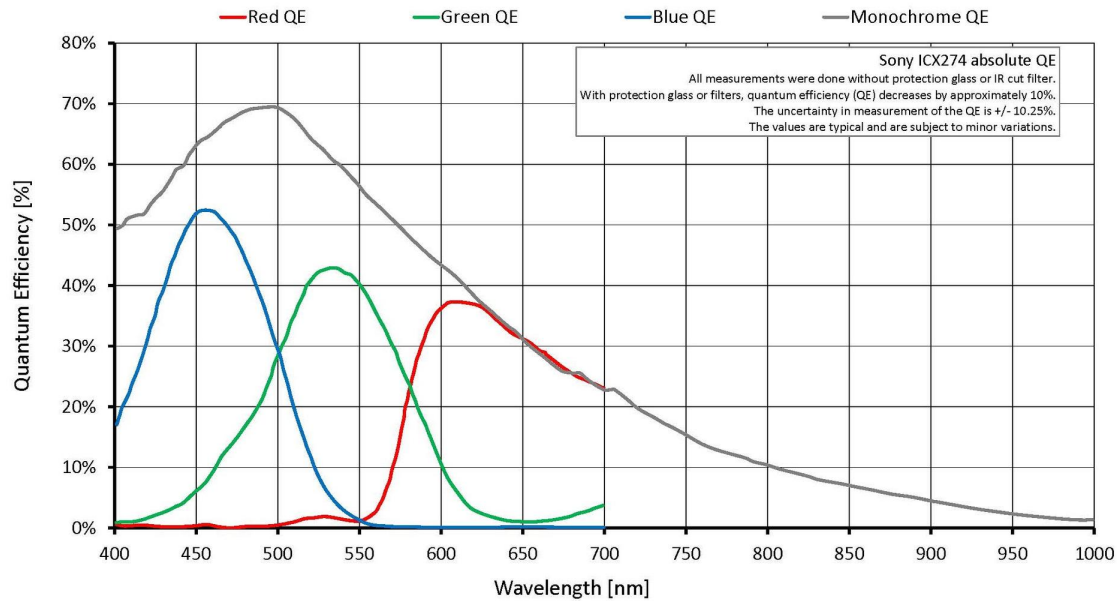
性能参数

Prosilica GC	1600H
接口	IEEE 802.3 1000baseT
分辨率	1620 (H) × 1220 (V)
传感器	Sony ICX274
传感器类型	CCD Progressive
传感器尺寸	Type 1/1.8
像元尺寸	4.4 μm × 4.4 μm
标准镜头接口	C-Mount
最大满帧帧率	25 fps
ADC	12 Bit
缓存 (RAM)	64
非易失性内存 (Flash)	1024 KByte (for selected models only)
成像性能	
<p>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。</p>	
在波长为529nm下，量子转换效率	70 %
暗噪声	10.7 e ⁻
饱和电子数	3300 e ⁻
动态范围	49.3 dB
绝对灵敏度阈值	11.2 e ⁻
输出	
Bit位数	8/12 Bit
黑白像素格式	Mono8, Mono12, Mono12Packed
RGB彩色像素格式	RGB8Packed, BGR8Packed
原始像素格式	BayerRG8, BayerRG12, BayerRG12Packed
通用输入输出口(GPIOs)	
TTL I/Os	1 input, 1 output
光耦 I/Os	1 input, 1 output
RS232	1
工作条件/尺寸	
工作温度	0 °C to +50 °C ambient (without condensation)
电源要求 (DC)	5 to 25 VDC
功耗	3.3 W at 12 VDC
重量	105 g
尺寸(L × W × H in mm)	59 × 46 × 33 (including connectors)

Prosilica GC
符合规范

1600H

CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003



特性

Image optimization features:

- Auto gain (manual gain control: 0 to 30 dB; 1 dB increments)
- Auto exposure (manual exposure control: 10 μ s to 68.7 s; 1 μ s increments)
- Auto white balance (GC1600CH only)
- Binning (horizontal and vertical) (sum)
- Black level (Offset)
- Gamma correction
- Hue, saturation, color transformation (GC1600CH only)
- Three look-up tables (LUTs)
- Region of interest (ROI), DSP subregion (selectable ROI for auto features)

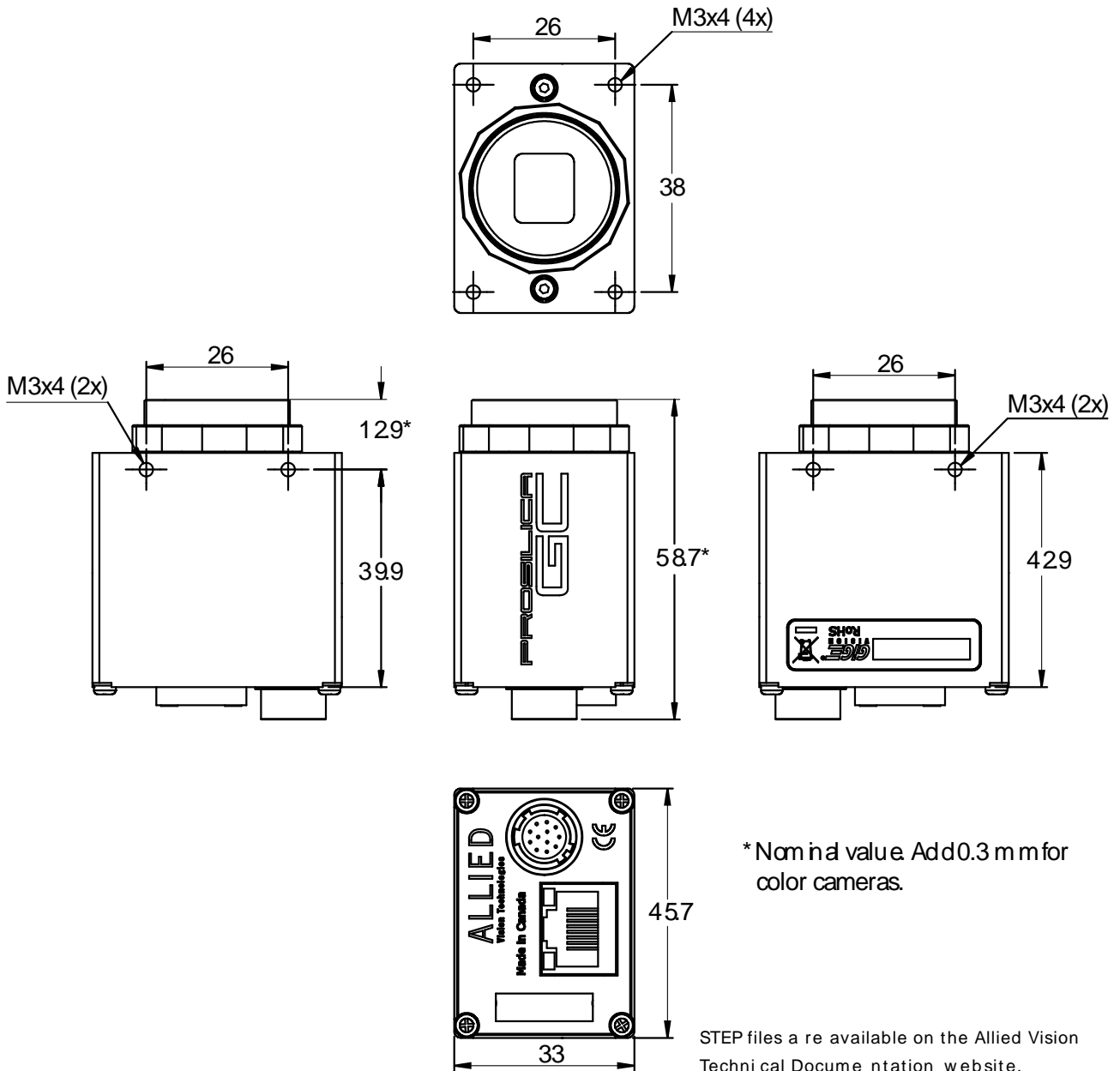
Camera control features:

- Auto-iris (video type)
- Event channel
- Global shutter (digital shutter)



- IEEE 1588 Precision Time Protocol
- Image chunk data
- Recorder and Multiframe acquisition modes
- RS232
- Three storable user sets
- StreamBytesPerSecond (bandwidth control)
- StreamHoldCapacity (Up to 33 frames at full resolution)
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring (mainboard only)
- Non-volatile memory 1024 KByte (for selected models only)

外形尺寸





应用场景

Prosilica GC1600H is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Ophthalmology
- LCD panel inspection
- Aeronautical and aerospace
- Biometrics
- Public security
- Surveillance
- Traffic imaging
- OEM applications