Allied Vision

Prosilica GC
1380H

- Sony ICX285 CCD sensor
- 30 fps @ full resolution
- Rugged housing
- Video-type auto iris

Description

GigE Vision, Sony ICX285 EXview CCD sensor, auto-iris, 30 fps

Prosilica GC1380H is a 1.4 Megapixel camera with a GigE Vision compliant Gigabit Ethernet interface and Hirose port. Prosilica GC1380H is offered in both monochrome and color models. This camera incorporates the high quality Type 2/3 (11.0 mm diagonal) Sony ICX285 CCD sensor with EXview HAD CCD technology that provides superior image quality, excellent sensitivity, and low noise. At full resolution, this camera has a frame rate of 30 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 (GC1380H) and color (GC1380CH) 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

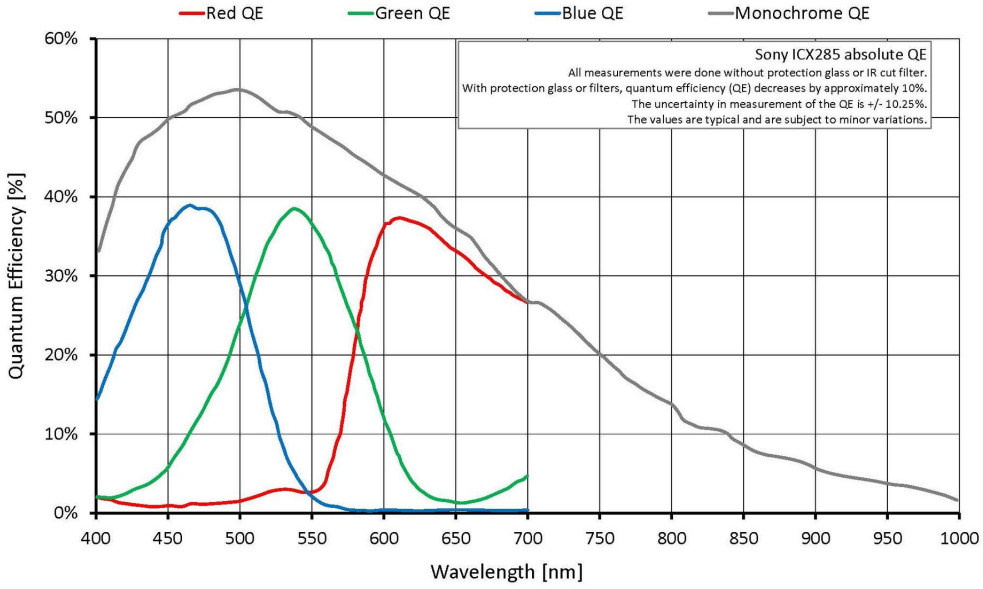
Options:

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

See the Modular Concept for lens mount and optical filter options.

Specifications

Prosilica GC	1380H
インターフェイス	IEEE 802.3 1000baseT
解像度	1360 (H) × 1024 (V)
センサー	Sony ICX285
Sensor type	CCD Progressive
センサーサイズ	Type 2/3
ピクセルサイズ	6.45 µm × 6.45 µm
レンズマウント (標準搭載)	C-Mount
フレームレート (フル解像度)	30 fps
ADC	12 bit
Image buffer (RAM)	64
Output	
Bit depth	8/12 bit
ビデオフォーマット(Mono)	Mono8, Mono12, Mono12Packed
ビデオフォーマット(RGB)	RGB8Packed, BGR8Packed
ビデオフォーマット(Raw)	BayerRG8, BayerRG12, BayerRG12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 1 output
Opto-isolated I/Os	1 input, 1 output
RS232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
消費電力	3.5 W at 12 VDC
Mass	111 g
Body dimensions (L × W × H in mm)	59 × 46 × 33 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003



Features

Image optimization features:

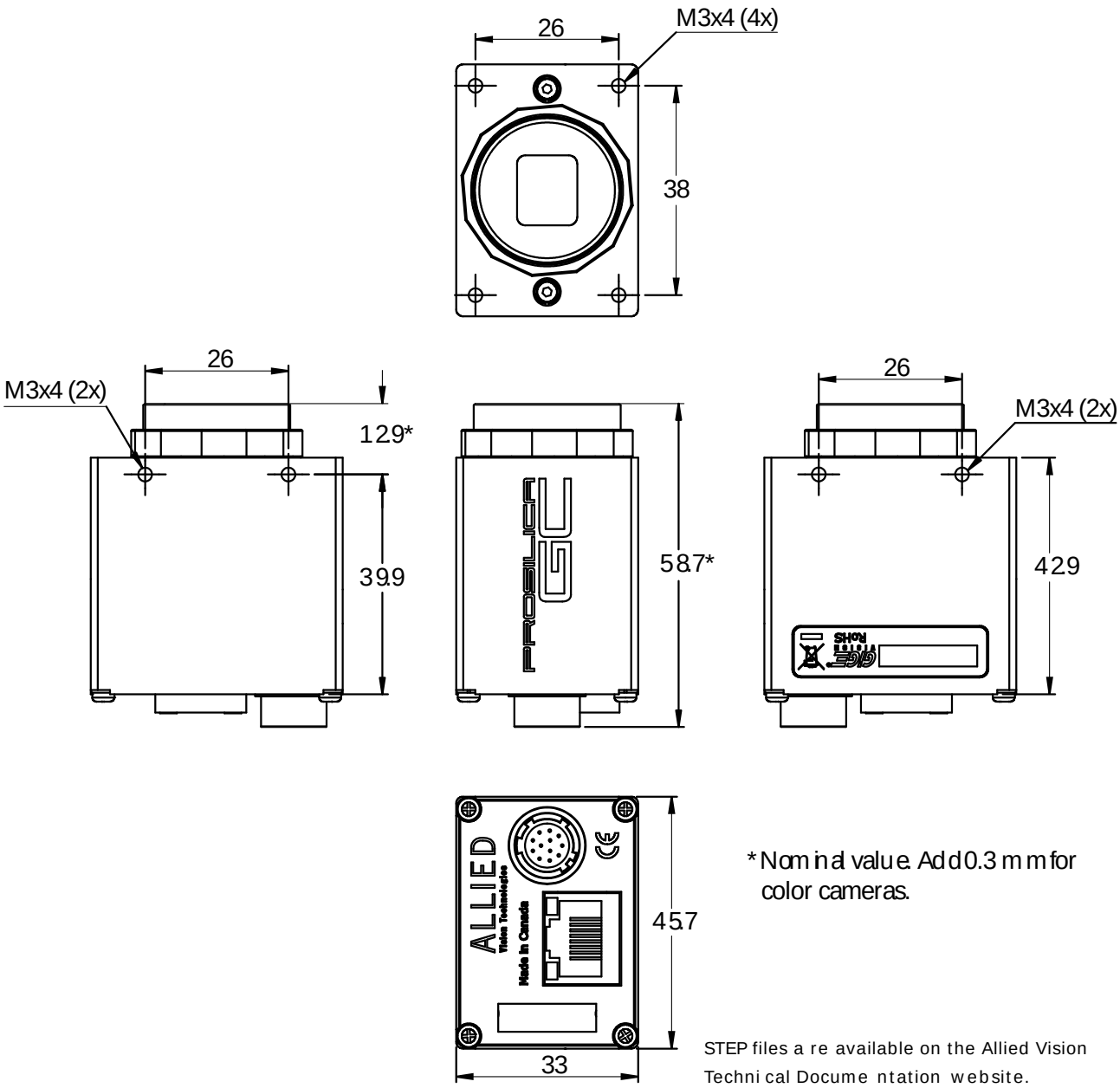
- Auto gain (manual gain control: 0 to 33 dB, 1 dB increments)
- Auto exposure (manual exposure control: 10 µs to 72.9 s; 1 µs increments)
- Auto white balance (GC1380CH only)
- Binning (horizontal and vertical) (sum)
- Black level (Offset)
- Gamma correction
- Hue, saturation, color transformation (GC1380CH 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 46 frames at full resolution)
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring (mainboard only)

Technical drawing



*Nominal value. Add 0.3 mm for color cameras.

STEP files are available on the Allied Vision Technical Documentation website.

Applications

Prosilica GC1380H is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Ophthalmology
- Microscopy
- Fluorescence
- Aeronautical and aerospace
- Public security
- Surveillance
- Traffic imaging