

- Camera Link InGaAs camera
- QVGA resolution
- Power over Ethernet
- Active sensor cooling
- High dynamic range
- 344 fps

See the invisible

Short-wave infrared (SWIR) cameras with InGaAs sensor technology

Goldeye CL-008 XSWIR 1.9 TEC2 with FPA 320 × 256 | 30 μm | Extended Range InGaAs runs 344.0 frames per second at 0.1 MP resolution.

Goldeye cameras are equipped with InGaAs sensor technology making them sensitive in the short wave infrared spectrum ranging from 900 nm to 1,700 nm. Some models have extended sensitivity in the visible spectrum down to 400 nm or up to 2200 nm. All Goldeye SWIR cameras can be operated at very high frame rates and capture outstanding low-noise images. They are the perfect choice for industrial and scientific applications beyond the visible spectrum. All Goldeye models are available with either a Camera Link or a GigE Vision interface.

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

[AcquireControl](#) adds extensive image analysis functions, such as:

- Pseudo color LUT with several color profiles
- Auto contrast
- Auto brightness
- Analyze multiple regions (rectangular, circle) within the image
- Real-time statistics and histogram display

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

Specifications

Interface	Camera Link Base
Resolution	320 (H) × 256 (V)
Spectral range	1100 nm to 1900 nm
Sensor	FPA 320 × 256 30 μm Extended Range InGaAs
Sensor type	InGaAs
Sensor size	No standard size
Pixel size	30 μm × 30 μm
Lens mounts (available)	C-Mount
Max. frame rate at full resolution	344 fps
ADC	14 Bit
Image buffer (RAM)	256 MByte
Cooling temperature	-30 °C (default and calibrated) -20 °C (calibrated) -10 °C, 0 °C (uncalibrated) User configurable
Dark current	1.2 Me ⁻ /s (at -30 °C FPA temperature)
Temporal dark noise	1.8 ke ⁻ (Gain0), 200 e ⁻ (Gain1)
Saturation capacity	5.0 Me ⁻ (Gain0), 140 ke ⁻ (Gain1)
Dynamic range	68 dB (Gain0), 57 dB (Gain1)

Output

Bit depth	8-bit to 14-bit
Monochrome pixel formats	Tap Geometry 1X 1Y: Mono8, Mono10, Mono12, Mono14 Tap Geometry 1X2 1Y: Mono8, Mono10, Mono12

General purpose inputs/outputs (GPIOs)

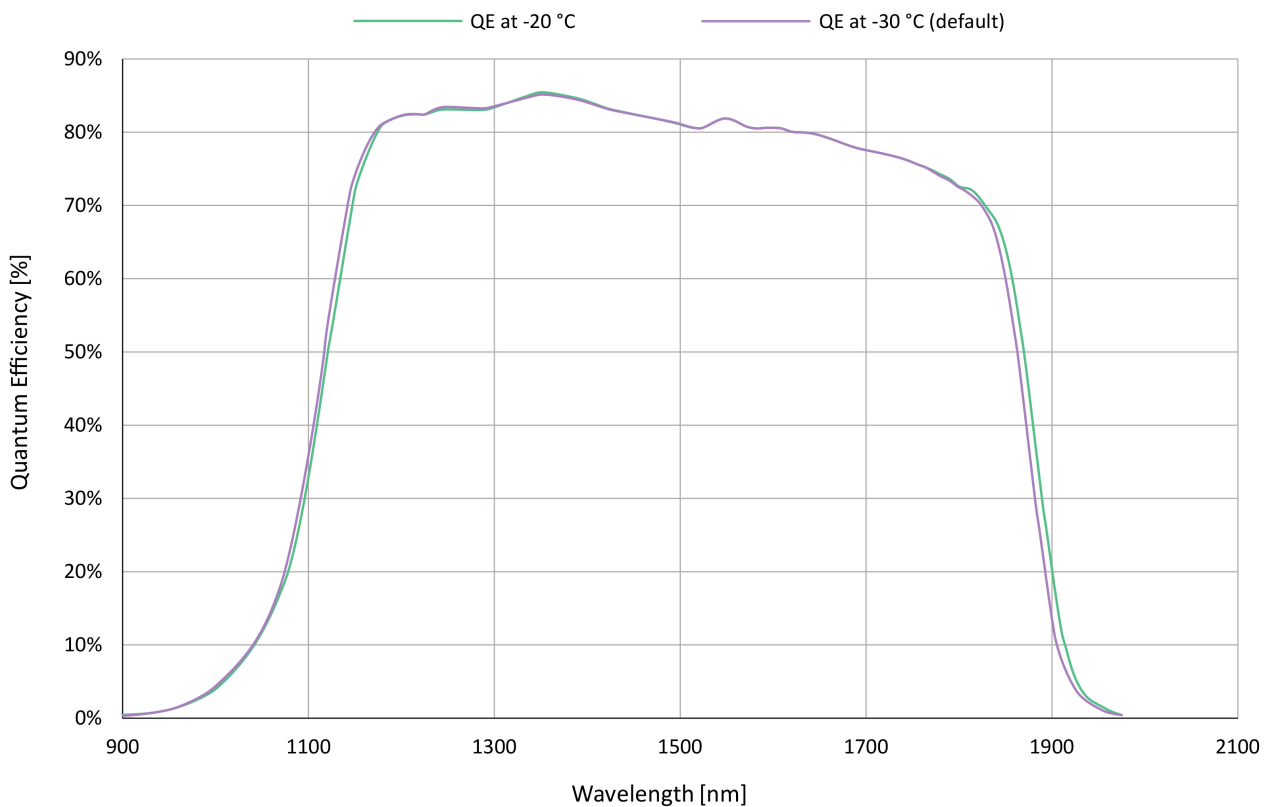
TTL I/Os	LVTTL I/Os: 1 input, 1 output
Opto-isolated I/Os	1 input, 2 outputs
RS232	115 200 Baud, 8N1 (adjustable)

Operating conditions/dimensions

Operating temperature	-20 °C to +55 °C (housing)
Power requirements (DC)	10.8 V to 30.0 V

Power consumption	20 W (at 12 VDC)
Mass	730 g (with C-Mount adapter)
Body dimensions (L × W × H in mm)	90 × 80 × 80

Quantum efficiency



Features

Image control: Auto

- Auto contrast
- Auto exposure

Image control: Other

- Background correction
- Binning
- DPC (defect pixel correction)
- LUT (look up table)
- Multiple ROIs (regions of interest)
- NUC (non-uniformity correction)

Camera control

- Acquisition frame rate
- Event channel
- Firmware update in the field
- I/O and trigger control
- Image chunk data
- Stream hold
- User sets

Sensor temperature control

- Temperature management by TEC
- Temperature status indicator

