

// EXTREME

Goldeye – Excellence in Infrared



Goldeye short-wave infrared (SWIR) cameras are available in two different configurations: a compact ruggedized industrial design without fan and an advanced scientific design with nitrogen gas filled cooling chamber. All Goldeye cameras are equipped with active thermoelectric cooling (TEC) to reduce noise and enable extended exposure times as well as constant image as well as constant image quality. Goldeye cameras can be operated at very high frame rates and capture outstanding low-noise images. They are the perfect choice for industrial applications beyond the visible spectrum.

Key facts

- // VGA and QVGA resolution
- // InGaAs FPAs, 900 nm to 1700 nm
- // Up to 344 fps



Benefits and features

- // Power over Ethernet (PoE/PoE+)
- // Built-in non-uniformity, pixel defect and background correction
- // Stabilized thermoelectric sensor cooling
- // Analog high gain mode
- // Optocoupled and TTL I/Os, RS-232
- // Look-up tables
- // Storable user sets
- // Various mount and IR filter options
- // Binning

// SPECIFICATIONS – OUR CAMERAS AT A GLANCE

Goldeye



Family-specific:	Goldeye G	Goldeye CL
Interface	IEEE 802.3 1000BASE-T	Camera Link Base
Operating temperature	+20 °C to +55 °C (housing)	+20 °C to +55 °C (housing)
Power requirements	DC 10.8 V to 30 V or PoE /PoE+	DC 10.8 V to 30 V
Power consumption	Min. 5 W @ 12 V DC (cooling switched off)	Min. 5 W @ 12 V DC (cooling switched off)
I/Os	1 in, 1 out LV TTL; 1 in, 2 out optocoupled	1 in, 1 out LV TTL; 1 in, 2 out optocoupled
Regulations	CE, FCC Class A, FCC Class B, RoHS (2011/65/EU)	CE, FCC Class B, RoHS (2011/65/EU)

Model-specific:	G/CL-008 SWIR	G/CL-032 SWIR
Sensor	InGaAs with TEC1 cooling ($\Delta T = -20$ K)	InGaAs with TEC1 cooling ($\Delta T = -30$ K)
Resolution	320 x 256	636 x 508
Megapixels	0.08	0.3
Spectral range	900 nm to 1700 nm	900 nm to 1700 nm
Max. frame rate	344 fps	100 fps
Cell size	30 μm x 30 μm	25 μm x 25 μm
Standard mount	C-Mount	C-Mount
Dimensions (LxWxH)	93 x 55 x 55 mm incl. C-Mount and connectors	93 x 55 x 55 mm incl. C-Mount and connectors
Power over Ethernet	IEEE 802.3af (PoE)	IEEE 802.3af (PoE)

Model-specific:	G-032 SWIR Cool	G/CL-033 SWIR
Sensor type	InGaAs with TEC2 cooling ($\Delta T = -60$ K)	InGaAs with TEC1 cooling ($\Delta T = -25$ K)
Resolution	636 x 508	640 x 512
Megapixels	0.3	0.3
Spectral range	900 nm to 1700 nm	900 nm to 1700 nm
Max. frame rate	100 fps	301 fps
Cell size	25 μm x 25 μm	15 μm x 15 μm
Standard mount	C-Mount	C-Mount
Dimensions (LxWxH)	105 x 80 x 80 mm incl. C-Mount	93 x 55 x 55 mm incl. C-Mount
Power over Ethernet	IEEE 802.3at (PoE+)	IEEE 802.3af (PoE)

Options:

Modular concept

- // Various IR bandpass filters
- // F-Mount, M42-Mount
- // Silver housing