



Goldeye CL-033 TECless

- Fastest Camera Link InGaAs SWIR camera
- VGA resolution
- TECless
- Compact industrial design, no fan
- Simple camera configuration via GenCP

Goldeye CL-033 TECless - High-speed TECless VGA InGaAs camera

The Goldeye CL-033 TECless high-speed camera is the fastest VGA resolution short wave infrared camera (SWIR) with Camera Link interface. Frame rates up to 301 fps at full resolution enable you to access versatile application fields and to speed up your processes. Thanks to its very affordable price, many cost-sensitive applications can benefit from the camera's outstanding performance. Save time and money to integrate the camera into your system: A small form factor and multiple mounting options let the camera fit easily into compact system designs. In addition, its standardized Camera Link interface with GenCP support and comprehensive I/O control options simplify the connection to your software solution and the synchronization with other system components.

Several on-board image correction features contribute to the Goldeye's outstanding image quality.

Reveal more of the invisible with Goldeye SWIR cameras!

Benefits and features

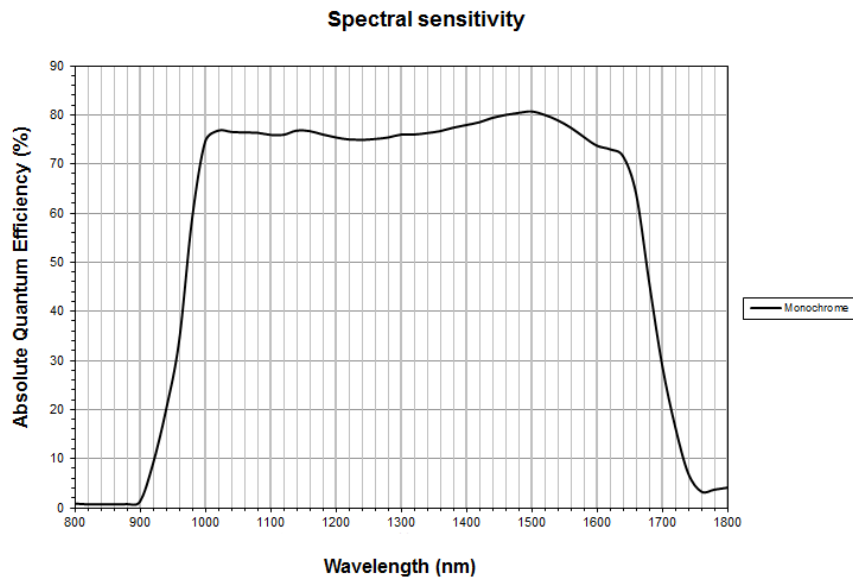
- Compact industrial design
- Up to 301 fps at full resolution
- Simple camera configuration via GenCP
- Comprehensive I/O control options
- Automated on-board image correction

Options

- Available with C-Mount; F-Mount and M42-Mount available on request

性能参数

Goldeye	CL-033 TECless
接口	Camera Link Base
分辨率	640 (H) × 512 (V)
Spectral range	900 nm to 1700 nm
传感器	InGaAs FPA 640 × 512
传感器类型	InGaAs
传感器尺寸	No standard size
像元尺寸	15 μm × 15 μm
标准镜头接口	C-Mount, F-Mount, M42-Mount
最大满帧帧率	301 fps
ADC	14 Bit
成像性能	
Cooling temperature	(n/a)
Dark current	430 ke ⁻ /s (@ +45 °C FPA temperature)
暗噪声	390 e ⁻ (Gain0), 32 e ⁻ (Gain2)
饱和电子数	1.2 Me ⁻ (Gain0), 25 ke ⁻ (Gain2)
动态范围	69 dB (Gain0), 59 dB (Gain2)
输出	
Bit位数	8 - 14 Bit
黑白像素格式	Mono8, Mono12, Mono12Packed, Mono14
通用输入输出(GPIOs)	
TTL I/Os	LVTTL I/Os: 1 input, 1 output
光耦 I/Os	1 Input, 2 Outputs
RS232	115 200 Baud, 8N1 (adjustable)
工作条件/尺寸	
工作温度	-20 °C to +55 °C (Case)
电源要求 (DC)	10.8 V DC to 30.0 V
功耗	6.0 W (@ 12 VDC)
重量	320 g (with C-Mount adapter)
尺寸(L × W × H in mm)	78 × 55 × 55
符合规范	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS); FCC Class B



特性

IR-specific features (camera and sensor)

- Integrated correction data sets, compensation of sensor inhomogeneity and underlying structures (non-uniformity correction - NUC)
- Defect pixel correction
- Background correction

General features

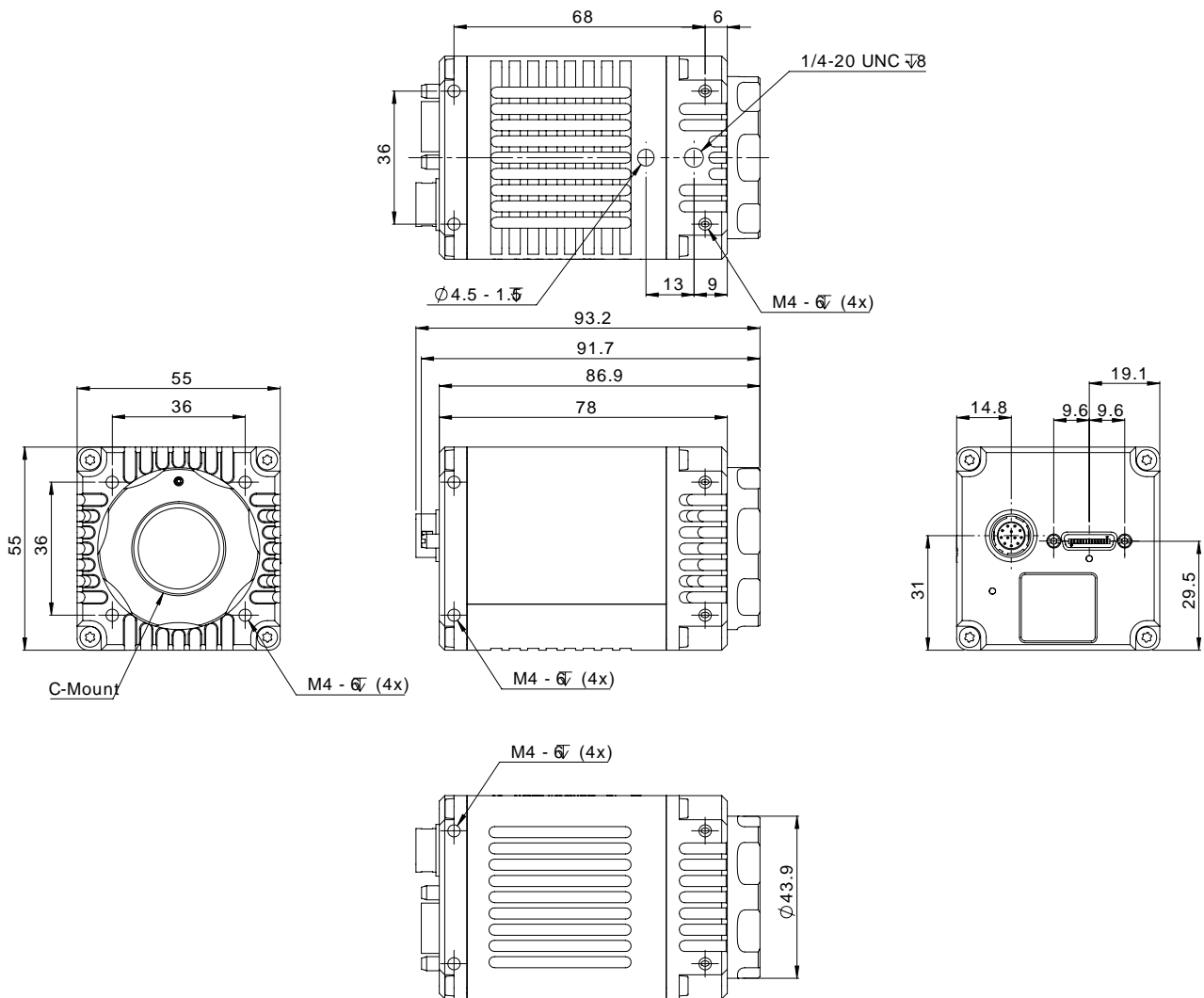
- Automatic exposure time control
- Gain (analog)
- I/O configuration and trigger control
- Stream hold (deferred image output)
- Storable user sets
- Firmware update in the field
- Region of interest (ROI) control, Look-up table (LUT) support, as well as various Auto-Features

Goldeye cameras are compatible with Allied Vision's Vimba SDK. Moreover, in combination with our AcquireControl software, extensive image analysis functions are available:

- 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

外形尺寸





应用场景

Goldeye cameras are very sensitive in the SWIR spectrum. They can be used in an extended operating temperature range. Thanks to integrated image correction, Goldeye cameras achieve an outstanding image quality with little noise and a high dynamic range. They are well-suited for many typical SWIR applications in various industry branches:

- Semiconductor industry: solar cell and chip inspection
- Recycling industry: plastics sorting
- Medical imaging, sciences: hyperspectral imaging, microscopy, OCT
- Metal and glass industry: thermal imaging of hot objects (250 °C to 800 °C)
- Agriculture industry: airborne remote sensing
- Printing industry: banknote inspection
- Electronics industry: laser beam profiling
- Surveillance and security: vision enhancement (e.g., through fog or night vision)

White Paper

To learn more about typical application fields for SWIR cameras, download our White Paper: [Seeing beyond the visible – short-wave infrared \(SWIR\) cameras offer new application fields in machine vision](#)