



// ALLIED VISION CAMERA LINE-UP

High-performance cameras  
for computer vision

// FOCUSING ON YOUR NEEDS

# Better vision for your application

For more than 30 years, we at Allied Vision have been helping people to reach their imaging goals. From raising production standards to detecting diseases faster, or simply knowing who crossed the finish line first, we know that precision and truth are vital for our customers. This is why we focus on what counts: delivering imaging solutions tailored to your needs.

### Quality you can count on

All our cameras are designed and manufactured in our own R&D and production facilities according to the ISO 9001 and ISO 13485 standards. Our three-year warranty reflects our commitment to quality.

### Personal service near you

Allied Vision's worldwide sales and support network allows us to deliver first-class service before, during, and after your purchase. We have offices and sales representatives in Europe, the USA, Singapore, and China, and have teamed up with selected distribution partners in more than 40 countries to ensure we are always there to help you whenever you need us.

This unique combination of technology, quality, and service has allowed us to become one of the world's leading providers of cameras for intelligent computer vision in applications as diverse as industrial inspection, scientific and medical imaging, traffic monitoring, and sports and entertainment.









### TKH Group

To provide a strong alliance for technology leadership in the vision area, Allied Vision is a member of the TKH Group which provides comprehensive imaging solutions and technologies.

// ATTRIBUTES AT A GLANCE

# The Allied Vision camera line-up

Allied Vision covers a large range of sensor resolutions, spectral sensitivities, frame rates, and features, offering the right camera for each application. Our modular concept ensures your camera can be tailored to your needs easily and cost-effectively.

Camera series	Interface options	Maximum resolution	Sensor options	Spectral range	Maximum frame rate	Where to find
Alvium 1500 C		5MP	CMOS Rolling and Global	Visible	119 fps	Page 4
Alvium 1800 C		19.7MP	CMOS Rolling and Global	Visible	289 fps	Page 6
Alvium 1800 U		20.2MP	CMOS Rolling, Global, Global Reset	Visible, NIR	289 fps	Page 8
Mako		5.1MP	CCD/CMOS Rolling, Global, Global Reset	Visible, NIR	286 fps	Page 10
Manta		12.4MP	CCD/CMOS Global	Visible, NIR	286 fps	Page 12
Prosilica GT		31.4MP	CCD/CMOS Global	Visible, NIR	53 fps	Page 14
Bonito PRO		26.2MP	CMOS Rolling and Global	Visible, NIR	80 fps	Page 16
Goldeye		0.3MP	InGaAs	SWIR	344 fps	Page 18
Accessories & Vimba Suite						Page 22

// ALVIUM 1500 C

# Powerful camera modules for embedded vision



AlviuM 1500 C is a revolutionary MIPI CSI-2 camera series that makes the performance of an industrial camera accessible to the embedded vision community. Equipped with industrial-grade CMOS sensors from ON Semiconductor, these cameras deliver superior image quality and high frame rates. Independent of the camera model, the standardized driver ensures quick integration and the flexibility to change camera models easily. Furthermore, with AlviuM 1500 MIPI CSI-2 camera modules, it is possible to precisely control single image acquisition using an external hardware trigger or via a software command. Precise frame rate control is also available in all models.

## Key facts

- // MIPI CSI-2 interface
- // Resolutions up to 5 megapixels
- // Global and Rolling Shutter sensors
- // Up to 119 frames per second at full resolution
- // On-board image corrections

## AlviuM 1500 C



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in $\mu\text{m}$	Mono/color/NIR
C-050	ON Semi PYTHON 480 CMOS	0.5	808 x 608	Type 1/3,6	Global	117	4.8 x 4.8	• / • / -
C-120	ON Semi AR0135CS CMOS	1.2	1280 x 960	Type 1/3	Global	52	3.75 x 3.75	• / • / -
C-210	ON Semi AR0521SR HD CMOS	2.1	1928 x 1088	Type 1/3,6	Rolling	119	2.2 x 2.2	• / • / -
C-500	ON Semi AR0521SR CMOS	5.0	2592 x 1944	Type 1/2,5	Rolling	68	2.2 x 2.2	• / • / -

### Hardware options

// Bare Board / Open Housing // C-Mount / CS-Mount / S-Mount

### Dimensions L x W x H in mm

// 13 x 26 x 26 (Bare Board)



// ALVIUM 1800 C

# Industrial-grade cameras for advanced embedded vision



The powerful Alvim 1800 C MIPI CSI-2 camera series gives embedded system developers access to Sony's high-performance image sensors popular in the machine vision industry. These offer excellent image quality and doubled frame rates compared to similar Alvim 1500 C models. Independent of the camera model, the standardized driver ensures quick integration and the flexibility to change camera models easily. Furthermore, with Alvim 1800 MIPI CSI-2 camera modules, it is possible to precisely control single image acquisition using an external hardware trigger or via a software command. Precise frame rate control is also available in all models.

## Key facts

- // MIPI CSI-2 interface
- // Resolutions up to 19,7 megapixels
- // Global and Rolling Shutter sensors
- // Up to 289 frames per second at full resolution
- // On-board image corrections

## Alvim 1800 C



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in µm	Mono/color/NIR
C-040	Sony IMX287 CMOS	0.4	728 × 544	Type 1/2.9	Global	289	6.9 × 6.9	• / • / -
C-158	Sony IMX273 CMOS	1.6	1456 × 1088	Type 1/2.9	Global	153	3.45 × 3.45	• / • / -
C-240	Sony IMX392 CMOS	2.4	1936 × 1216	Type 1/2.3	Global	126	3.45 × 3.45	• / • / -
C-319	Sony IMX295 CMOS	3.2	2064 × 1544	Type 1/1.8	Global	53	3.45 × 3.45	• / • / -
C-507	Sony IMX264 CMOS	5.1	2464 × 2056	Type 2/3	Global	34	3.45 × 3.45	• / • / -
C-508	Sony IMX250LLR/LQR CMOS	5.1	2464 × 2056	Type 2/3	Global	65	3.45 × 3.45	• / • / -
C-1236	Sony IMX304 CMOS	12.4	4112 × 3008	Type 1.1	Global	22	3.45 × 3.45	• / • / -
C-1240	Sony IMX226 CMOS	12.2	4024 × 3036	Type 1/1.7	Rolling	41	1.85 × 1.85	• / • / -
C-2050	Sony IMX183 CMOS	19.7	5376 × 3672	Type 1	Rolling	26	2.4 × 2.4	• / • / -

### Hardware options

// Bare Board / Open Housing // C-Mount / CS-Mount / S-Mount

### Dimensions L x W x H in mm

// 13 x 26 x 26 (Bare Board)



// ALVIUM 1800 U

# Entry into high-performance imaging



Alvium 1800 U is the camera series that allows you to enter high-performance imaging with ALVIUM® Technology for industrial applications. Equipped with the latest generation of Sony and ON Semiconductor sensors, these small and power-efficient cameras deliver high image quality and frame rates in a robust industrial housing. With its USB3-Vision-compliant interface and industrial-grade hardware, it is your workhorse for different machine vision applications whether it is on a PC-based or an embedded system.

## Key facts

- // USB3 Vision interface
- // Resolutions up to 20.2 megapixels
- // Global, Global Reset, and Rolling Shutter sensors
- // Up to 289 frames per second at full resolution
- // Near-infrared model

## Alvium 1800 U



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in µm	Mono/color/NIR
U-040	Sony IMX287 CMOS	0.4	728 x 544	Type 1/2.9	Global	289	6.9 x 6.9	• / • / -
U-050	ON Semi PYTHON 480 CMOS	0.5	808 x 608	Type 1/3.6	Global	117	4.8 x 4.8	• / • / -
U-120	ON Semi AR0135CS CMOS	1.2	1280 x 960	Type 1/3	Global	52	3.75 x 3.75	• / • / -
U-158	Sony IMX273 CMOS	1.6	1456 x 1088	Type 1/2.9	Global	153	3.45 x 3.45	• / • / -
U-240	Sony IMX392 CMOS	2.4	1936 x 1216	Type 1/2.3	Global	126	3.45 x 3.45	• / • / -
U-319	Sony IMX265 CMOS	3.2	2064 x 1544	Type 1/1.8	Global	53	3.45 x 3.45	• / • / -
U-500	ON Semi AR0521SR CMOS	5.0	2592 x 1944	Type 1/2.5	Rolling	68	2.2 x 2.2	• / • / -
U-501m NIR	ON Semi AR0522 CMOS	5.0	2592 x 1944	Type 1/2.5	Rolling	68	2.2 x 2.2	- / - / •
U-507	Sony IMX264 CMOS	5.1	2464 x 2056	Type 2/3	Global	34	3.45 x 3.45	• / • / -
U-508	Sony IMX250LLR/LGR CMOS	5.1	2464 x 2056	Type 2/3	Global	65	3.45 x 3.45	• / • / -
U-1236	Sony IMX304 CMOS	12.4	4112 x 3008	Type 1.1	Global	22	3.45 x 3.45	• / • / -
U-1240	Sony IMX226 CMOS	12.2	4024 x 3036	Type 1/1.7	Rolling, Global Reset	29	1.85 x 1.85	• / • / -
U-2050	Sony IMX183 CMOS	20.2	5496 x 3672	Type 1	Rolling, Global Reset	17	2.4 x 2.4	• / • / -

### Hardware options

// Bare Board / Open Housing / Closed Housing // C-Mount / CS-Mount / S-Mount // USB standard connector / USB 90° connector

### Dimensions L x W x H in mm

// 13 x 26 x 26 (Bare Board)



// MAKO

# Small size, powerful performance



Mako combines industrial performance and a rich feature set with a small size and an affordable price. Its GigE-Vision-compliant interface enables a reliable connection to your host over long distances up to 100 meters. Power over Ethernet and Trigger over Ethernet allow simplified and cost-optimized system setups as single cable solution. With advanced triggering features such as Precision Time Protocol (PTP), Mako cameras can be perfectly synchronized with other devices in a multi-camera system.

## Key facts

- // GigE Vision interface
- // Resolution up to 5,1 megapixels
- // Global, Global Reset, and Rolling Shutter sensors
- // Up to 286 frames per second at full resolution
- // Near-infrared and polarizer models

Mako



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in µm	Standard mount	Mono/color/NIR
G-032	Sony ICX424 CCD	0.3	658 x 492	Type 1/3	Global	102.3	7.4 x 7.4	C-Mount	• / • / -
G-040	Sony IMX287 CMOS	0.4	728 x 544	Type 1/2.9	Global	286	6.9 x 6.9	C-Mount	• / • / -
G-125	Sony ICX445 CCD	1.2	1292 x 964	Type 1/3	Global	30.3	3.75 x 3.75	C-Mount	• / • / -
G-131	Teledyne e2v EV76C560 CMOS	1.3	1280 x 1024	Type 1/1.8	Rolling, Global, Global Reset	62	5.3 x 5.3	C-Mount	• / • / -
G-158	Sony IMX273 CMOS	1.6	1456 x 1088	Type 1/2.9	Global	75.2	3.45 x 3.45	C-Mount	• / • / -
G-192	Teledyne e2v EV76C570 CMOS	1.9	1600 x 1200	Type 1/1.8	Rolling, Global, Global Reset	60	4.5 x 4.5	C-Mount	• / • / -
G-223	ams CMV2000 CMOS	2.2	2048 x 1088	Type 2/3	Global	49.5	5.5 x 5.5	C-Mount	• / • / -
G-234	Sony IMX249 CMOS	2.4	1936 x 1216	Type 1/1.2	Global	41.5	5.86 x 5.86	C-Mount	• / • / -
G-319	Sony IMX265 CMOS	3.2	2064 x 1544	Type 1/1.8	Global	37.6	3.45 x 3.45	C-Mount	• / • / -
G-419	ams CMV4000 CMOS	4.2	2048 x 2048	Type 1	Global	26.3	5.5 x 5.5	C-Mount	• / • / •
G-503	ON Semi MT9P031/P006 CMOS	5.0	2592 x 1944	Type 1/2.5	Rolling, Global, Global Reset	14	2.2 x 2.2	C-Mount	• / • / -
G-507	Sony IMX264 CMOS	5.1	2464 x 2056	Type 2/3	Global	23.7	3.45 x 3.45	C-Mount	• / • / -
G-508	Sony IMX250 MZR CMOS	5.1	2464 x 2056	Type 2/3	Global	23.7	3.45 x 3.45	C-Mount	• / - / -

## Modular concept

// Various IR cut / pass filters and protection glass // CS-Mount / M12-Mount (adapter)

## Dimensions (including connectors and standard mount) L x W x H in mm

// 60.5 x 29.2 x 29.2



# Versatility at its best



Providing the largest choice of sensors and an advanced feature set, Manta is Allied Vision's most versatile GigE Vision camera series. Numerous modular options, including angled head and board level versions, facilitate the camera integration in almost any application. Manta's advanced feature set simplifies multi-camera applications, reduces the need for cabling, and keeps your costs low.

### Key facts

- // GigE Vision interface
- // Resolutions up to 12.4 megapixels
- // Global Shutter sensor
- // Up to 286 frames per second at full resolution
- // Near-infrared models

### Manta



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in µm	Standard mount	Mono/color/NIR
G-031	Sony ICX618 CCD	0.3	656 x 492	Type 1/4	Global	125.2	5.6 x 5.6	C-Mount	• / • / -
G-032	Sony ICX424 CCD	0.3	656 x 492	Type 1/3	Global	80.7	7.4 x 7.4	C-Mount	• / • / -
G-033	Sony ICX414 CCD	0.3	656 x 492	Type 1/2	Global	88.7	9.9 x 9.9	C-Mount	• / • / -
G-040	Sony IMX287 CMOS	0.4	728 x 544	Type 1/2.9	Global	286.3	6.9 x 6.9	C-Mount	• / • / -
G-046	Sony ICX415 CCD	0.5	780 x 580	Type 1/2	Global	67.5	8.3 x 8.3	C-Mount	• / • / -
G-125	Sony ICX445 CCD	1.2	1292 x 964	Type 1/3	Global	31.0	3.75 x 3.75	C-Mount	• / • / -
G-145	Sony ICX285 CCD	1.4	1388 x 1038	Type 2/3	Global	15.0	6.45 x 6.45	C-Mount	• / • / •
G-145-30fps	Sony ICX285 CCD	1.4	1388 x 1038	Type 2/3	Global	30.1	6.45 x 6.45	C-Mount	• / • / -
G-146	Sony ICX267 CCD	1.4	1388 x 1038	Type 1/2	Global	17.8	4.65 x 4.65	C-Mount	• / • / -
G-158	Sony IMX273 CMOS	1.6	1456 x 1088	Type 1/2.9	Global	75.2	3.45 x 3.45	C-Mount	• / • / -
G-201	Sony ICX274 CCD	2.0	1624 x 1234	Type 1/1.8	Global	14.7	4.4 x 4.4	C-Mount	• / • / -
G-201-30fps	Sony ICX274 CCD	2.0	1624 x 1234	Type 1/1.8	Global	30.0	4.4 x 4.4	C-Mount	• / • / -
G-223	ams CMV2000 CMOS	2.2	2048 x 1088	Type 2/3	Global	53.7	5.5 x 5.5	C-Mount	• / • / -
G-235	Sony IMX174 CMOS	2.4	1936 x 1216	Type 1/1.2	Global	50.8	5.86 x 5.86	C-Mount	• / • / -
G-282	Sony ICX687 CCD	2.8	1936 x 1458	Type 1/1.8	Global	30.4	3.69 x 3.69	C-Mount	• / • / -
G-283	Sony ICX674 CCD	2.8	1936 x 1458	Type 2/3	Global	30.4	4.54 x 4.54	C-Mount	• / • / -
G-319	Sony IMX265 CMOS	3.2	2064 x 1544	Type 1/1.8	Global	37.6	3.45 x 3.45	C-Mount	• / • / -
G-419	ams CMV4000 CMOS	4.2	2048 x 2048	Type 1	Global	28.6	5.5 x 5.5	C-Mount	• / • / •
G-504	Sony ICX655 CCD	5.0	2452 x 2056	Type 2/3	Global	9.2	3.45 x 3.45	C-Mount	• / • / -
G-505	Sony ICX625 CCD	5.0	2452 x 2056	Type 2/3	Global	15.0	3.45 x 3.45	C-Mount	• / • / -
G-507	Sony IMX264 CMOS	5.1	2464 x 2056	Type 2/3	Global	23.7	3.45 x 3.45	C-Mount	• / • / -
G-895	Sony IMX267 CMOS	8.9	4112 x 2176	Type 1	Global	13.4	3.45 x 3.45	C-Mount	• / • / -
G-917	Sony ICX814 CCD	9.2	3384 x 2710	Type 1	Global	10.1	3.69 x 3.69	C-Mount	• / • / -
G-1236	Sony IMX304 CMOS	12.4	4112 x 3008	Type 1.1	Global	9.7	3.45 x 3.45	C-Mount	• / • / -

Modular concept		
// Various IR cut / pass filters and protection glass	// CS-Mount / M12-Mount (adapter)	// White medical design
// Power over Ethernet	// Angled head (selected models)	// Removed cover glass (G-145B only)
Board level versions (selected models)		
// Remote sensor head	// Different flex cable lengths up to 200 mm	// Power over Ethernet
// C-Mount / CS-Mount / M12-Mount (adapter)	// Removed cover glass (G-145 only)	
Dimensions (including connectors and standard mount) L x W x H in mm		
// 86.4 x 44 x 29		



# Robust and high resolution



Equipped with a robust, heat-dissipation-optimized housing and various lens control options, Prosilica GT cameras are engineered to handle harsh environments, extreme temperature variations, and constantly changing light conditions. Trigger over Ethernet using action commands enables single cable solutions, thereby reducing system costs. Prosilica GT is a real high performer, offering high resolutions and featuring CCD and CMOS sensors.

## Key facts

- // GigE Vision interface
- // Resolutions up to 31.4 megapixels
- // Global Shutter sensor
- // Up to 53 frames per second at full resolution
- // Near-infrared models
- // Extended operating temperature range: -20°C to +65°C (ambient)

## Prosilica GT



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in µm	Standard mount	Mono/color/NIR
GT1290	Sony ICX445 CCD	1.2	1280 × 960	Type 1/3	Global	33.3	3.75 × 3.75	C-Mount	• / • / -
GT1380	Sony ICX285 CCD	1.4	1360 × 1024	Type 2/3	Global	30.5	6.45 × 6.45	C-Mount	• / • / -
GT1600	Sony ICX274 CCD	2.0	1620 × 1220	Type 1/1.8	Global	25.8	4.44 × 4.44	C-Mount	• / • / -
GT1920	Sony ICX674 CCD	2.8	1936 × 1456	Type 2/3	Global	40.7	4.54 × 4.54	C-Mount	• / • / -
GT1930	Sony IMX174 CMOS	2.4	1936 × 1216	Type 1/1.2	Global	50.8	5.86 × 5.86	C-Mount	• / • / -
GT2000	ams CMV2000 CMOS	2.2	2048 × 1088	Type 2/3	Global	53.7	5.5 × 5.5	C-Mount	• / • / •
GT2050	ams CMV4000 CMOS	4.2	2048 × 2048	Type 1	Global	28.6	5.5 × 5.5	C-Mount	• / • / •
GT2450	Sony ICX625 CCD	5.0	2448 × 2050	Type 2/3	Global	15	3.45 × 3.45	C-Mount	• / • / -
GT2460	Sony IMX264 CMOS	5.1	2464 × 2056	Type 2/3	Global	23.7	3.45 × 3.45	C-Mount	• / • / -
GT2750	Sony ICX694 CCD	6.1	2750 × 2200	Type 1	Global	19.8	4.54 × 4.54	C-Mount	• / • / -
GT3400	Sony ICX814 CCD	9.2	3384 × 2704	Type 1	Global	13.2	3.69 × 3.69	C-Mount	• / • / -

## Prosilica GT Large Format



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in µm	Standard mount	Mono/color/NIR
GT1930L	Sony IMX174 CMOS	2.4	1936 × 1216	Type 1/1.2	Global	50.8	5.86 × 5.86	EF-Mount PA	• / • / -
GT4400	Sony IMX367 CMOS	19.6	4432 × 4436	Type 4/3	Global	6.12	3.45 × 3.45	F-Mount	• / • / -
GT5120	ON Semi PYTHON 25K CMOS	26.2	5120 × 5120	Type APS-H	Global	4.59	4.5 × 4.5	F-Mount	• / • / •
GT5400	Sony IMX387 CMOS	16.8	5472 × 3084	Type 4/3	Global	7.14	3.45 × 3.45	F-Mount	• / • / -
GT6400	Sony IMX342 CMOS	31.4	6480 × 4860	Type APS-C	Global	3.82	3.45 × 3.45	F-Mount	• / • / -

### Modular concept Prosilica GT

- // CS-Mount / F-Mount / Birger EF-Mount / M42-Mount
- // Various IR cut / pass filters and protection glass

### Modular concept Prosilica GT Large Format Housing

- // F-Mount / F-Mount PA / EF-Mount PA / M42-Mount / M42-Mount PA / M58-Mount / M58-Mount PA / C-Mount (selected models) / TFL-Mount (selected models)
- // Various IR cut filters and protection glass

### Dimensions (including connectors and default mount) L × W × H in mm

- // Prosilica GT: 86 × 53.3 × 33
- // Prosilica GT Large Format: 96 × 66 × 53.3



Prosilica GT



Prosilica GT Large Format



// BONITO PRO

# High-speed imaging



Bonito PRO is Allied Vision's high-bandwidth camera series with a CoaXPress interface. Equipped with four DIN 1.0/2.3 connectors, the camera is capable of transmitting 25 Gbps via four CXP-6 high-speed connections. Bonito PRO boasts a rugged, fan-less housing design and powerful feature set – making it the ideal choice for high-definition imaging applications that require high throughput, robustness, and system design-in flexibility.

## Key facts

- // CoaXPress interface
- // 26.2 megapixel resolution
- // Global Shutter sensor
- // 79.7 frames per second at full resolution
- // Near-infrared model
- // Extended operating temperature range: -20° C to +70° C (housing)

## Bonito PRO



Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Pixel size in µm	Standard mount	Mono/color/NIR
X-2620	ON Semi PYTHON 25K CMOS	26.2	5120 x 5120	Type APS-H	Global	79.7	4.5 x 4.5	F-Mount	• / • / •

### Modular concept

- // F-Mount PA / EF-Mount PA / M42-Mount / M42-Mount PA / M58-Mount / M58-Mount PA / various optical filters
- // Various IR cut filters and protection glass

### Dimensions (including connectors and standard mount) L x W x H in mm

- // 114.9 x 70 x 70



# Imaging beyond the visible



Goldeye short-wave infrared (SWIR) cameras offer a high grade of versatility whether resolution, interface, lens-mount, optical filter, or thermo-electric sensor cooling wise (TEC1, TEC2, TECless). They can be operated at high frame rates and their multiple on-board image processing features provide superior imaging results with low-noise high linearity, and high dynamic range. Experience an eased system integration supported by features like Power over Ethernet enabling single cable solutions, comprehensive I/O control functionality, and multiple mounting options. Moreover, a standardized GigE Vision or Camera Link interface and GenICam-like feature control provide you a plug & play feeling when utilizing these robust, high-quality SWIR cameras in imaging applications beyond the visible spectrum.

## Key facts

- // Camera Link or GigE Vision interface
- // Resolution up to 0.3 megapixels (QVGA and VGA)
- // InGaAs sensor for SWIR sensitivity
- // Up to 344 frames per second at full resolution
- // Extended operating temperature range: -20° C to +55° C (housing)

## Goldeye G/CL



Camera model	Sensor	Shutter mode	Mega-pixels	Resolution	Max. frame rate in fps	Pixel size in µm	Spectral range in nm	Standard mount	Power over Ethernet
G/CL-008 TEC1	InGaAs FPA with TEC1 cooling (Min. ΔT = 20 K)	Global	0.1	320 × 256	344	30 × 30	900 to 1700	C-Mount	IEEE 802.3af (PoE)
G/CL-032 TEC1	InGaAs FPA with TEC1 cooling (Min. ΔT = 30 K)	Global	0.3	636 × 508	100	25 × 25	900 to 1700	C-Mount	IEEE 802.3af (PoE)
G/CL-033 TEC1	InGaAs FPA with TEC1 cooling (Min. ΔT = 25 K)	Global	0.3	640 × 512	301	15 × 15	900 to 1700	C-Mount	IEEE 802.3af (PoE)
G/CL-033 TECless	InGaAs FPA without TEC cooling	Global	0.3	640 × 512	301	15 × 15	900 to 1700	C-Mount	IEEE 802.3af (PoE)
G/CL-034 TEC1	InGaAs FPA with TEC1 cooling (Min. ΔT = 25 K)	Global	0.3	636 × 508	303	15 × 15	900 to 1700	C-Mount	IEEE 802.3af (PoE)

## Goldeye G/CL Cool



Camera model	Sensor	Shutter	Mega-pixels	Resolution	Max. frame rate in fps	Pixel size in µm	Spectral range in nm	Standard mount	Power over Ethernet
G/CL-008 Cool TEC1	InGaAs FPA with TEC1 cooling (Min. ΔT = 30 K)	Global	0.1	320 × 256	344	30 × 30	900 to 1700	C-Mount	IEEE 802.3af (PoE)
G/CL-032 Cool TEC2	InGaAs FPA with TEC2 cooling (Min. ΔT = 60 K)	Global	0.3	636 × 508	100	25 × 25	900 to 1700	C-Mount	IEEE 802.3af (PoE+)

### Modular concept

// IR band-pass filter // F-Mount / M42-Mount // Silver design

Dimensions (including connectors and standard mount) L x W x H in mm

// Standard: 93.2 x 55 x 55

// Cool: 105.8 x 80 x 80



Goldeye G/CL



Goldeye G/CL Cool

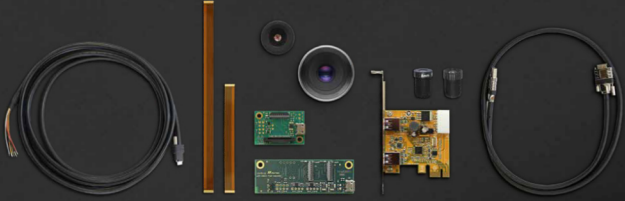
# Features comparison

Visit our website at [www.alliedvision.com](http://www.alliedvision.com) and compare the cameras of your choice!

Image optimization features	Alvium 1500 C	Alvium 1800 C	Alvium 1800 U	Mako					Manta				Prosilica GT					Prosilica GT LF			Bonito PRO	Goldeye		
				G-032, G-125	G-131, G-192, G-503	G-223, G-419	G-040, G-158, G-234, G-319, G-507	G-508	G-032	G-223, G-419	G-040, G-158, G-235, G-319, G-507, G-1236	other models	GT1290, GT1380, GT1600	GT1920, GT1930, GT2450	GT2000, GT2050	GT2450	GT2750, GT3400	GT1930L	GT3120	GT4400, GT5400, GT6400	X-620	G	CL	
Auto-Iris	-	-	-	-	-	-	-	-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
Video-Iris	-	-	-	-	-	-	-	-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
DC-Iris	-	-	-	-	-	-	-	-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
P-Iris	-	-	-	-	-	-	-	-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
High Dynamic Range (HDR)	-	-	-	-	-	✓	-	-	-	✓	-	-	-	✓	-	-	-	-	-	-	-	-	-	-
Defect pixel correction	✓	✓	✓	-	✓	✓	-	-	-	✓	-	-	-	✓	-	-	-	-	-	✓	✓	✓	✓	✓
Fixed Pattern Noise Correction (FPNC)	✓	✓ <sup>(8)</sup>	✓ <sup>(8)</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	-	-
Region of interest (ROI)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ <sup>(9)</sup>	✓	✓	✓	✓
Binning	-	-	-	✓	✓	-	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Decimation	-	-	-	-	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
Auto gain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Auto exposure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Auto white balance	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-	-
Look-up tables (LUT)	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gamma correction	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Hue, saturation, color correction	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-	-	-	-	-
Reverse X/Y	✓	✓	✓	-	✓	✓	✓	✓	-	✓	✓	X only	-	✓	✓	X only	✓	-	✓	-	-	-	-	-
Camera control features	Alvium 1500 C	Alvium 1800 C	Alvium 1800 U	Mako					Manta				Prosilica GT					Prosilica GT LF			Bonito PRO	Goldeye		
Bandwidth control	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-	-
Stream hold	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-	-
Chunk data	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-	-
Sync out modes	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trigger modes:																								
single	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
bulk	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
level	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RS232	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Event channel	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
IEEE 1588 Precision Time Protocol (PTP)	-	-	-	-	-	✓	✓	✓	-	✓	✓	✓ <sup>(10)</sup>	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
Action commands	-	-	-	-	-	✓	✓	✓	-	✓	✓	✓ <sup>(10)</sup>	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
Storable user sets	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature monitoring	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓ <sup>(10)</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

<sup>(8)</sup> Selected models only. Please contact our sales team for details. <sup>(9)</sup> Exclusion: Alvium 1800 U-2050 and Alvium 1800 C-2050. <sup>(10)</sup> Multiple ROIs (up to 4).

## Tested for more performance and reliability



Allied Vision offers a wide range of approved computer vision accessories, including lenses, interface cables and cards, hubs and repeaters, trigger, I/O and power cables, power supplies, tripod adapters, and adapter boards.

These have been extensively tested by our engineers to ensure complete compatibility with our cameras. As a result, we can ensure that they provide the best possible performance, image quality, and reliability for your application. Not sure which accessories are best for your Allied Vision camera or application? Our friendly sales team would love to advise you. Call them now!

## The easy way to integrate into your system

### Future-proof SDK

Vimba is GenICam-based from the ground up and provides transport layers for all Allied Vision GigE Vision, USB3 Vision, FireWire, and Camera Link cameras.

### Platform independence

The Vimba SDK supports Windows, Linux, and Linux for ARM for easy camera integration into PC-based and embedded systems. Applications are compatible directly or by cross-compiling. Contact us if you are looking for other operating system versions.

### Support for third-party software

Vimba supports popular third-party image processing libraries including Cognex VisionPro, MathWorks MAI LAB, Stemmer Imaging Common Vision Blox, MVTec HALCON and MERLIC, OpenCV, and many more!

### APIs for C, C++, and .NET, and Python

The Vimba SDK offers easy-to-use but powerful C, C++, .NET, and Python APIs. Vimba includes several code examples and comprehensive user documentation.

### Comprehensive Suite

The Vimba Suite provides everything you need to start building advanced applications: ready-to-use code examples, the Vimba Viewer application, Vimba's Image Transform Library, Vimba's Defective Pixel Manager, Firmware Updater, and Driver Installer.

### Download

Vimba SDK can be downloaded for free. All Vimba downloads include programming examples and user manuals.

### Powerful drivers

The Vimba Suite provides drivers for GigE & USB3 Vision on Windows only. Open-source CSI-2 drivers are available on Github.com. They support all Allied Vision MIPI CSI-2 cameras regardless of sensor or feature set!

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