

// New Alvium Models July 2020
Alvium USB3 Vision
and CSI-2 models with
Sony IMX sensors



Camera Highlights

Model	Sensor	SensorType	Sensor Size	Pixel Size	Resolution	Frame Rate	Interface
1800 U-240 1800 C-240	Sony IMX392	CMOS Global shutter	Type 1/2.3	3.45 µm x 3.45 µm	2.4 MP 1936 (H) × 1216 (V)	126 fps USB3 126 fps CSI-2	USB 3.1 Gen 1 CSI-2
1800 U-508 1800 C-508	Sony IMX250	CMOS Global shutter	Type 2/3	3.45 µm x 3.45 µm	5.1 MP 2464 (H) × 2056 (V)	65 fps USB3 65 fps CSI-2	USB 3.1 Gen 1 CSI-2
1800 U-1240 1800 C-1240	Sony IMX226	CMOS Rolling shutter	Type 1/1.7	1.85 µm x 1.85 µm	12.2 MP 4024 (H) × 3036 (V)	29 fps USB3 41 fps CSI-2	USB 3.1 Gen 1 CSI-2

The Alvium 1800 Series – The Best of Both Worlds

Allied Vision is proud to announce the release of three exciting new model series to the innovative and popular 1800 Series. All models incorporate high-quality Sony IMX Pregius industrial machine vision sensors. Powered by the revolutionary ALVIUM® Technology, a unique system-on-chip designed by Allied Vision, the camera series delivers industrial performance to both machine vision and embedded vision applications.

The 1800 series provides sophisticated image control and triggering features for USB cameras. Moreover, following MIPI CSI-2 and USB3 Vision standards, Alvium 1800 cameras are easily integrated into both embedded and machine vision applications.

Chroma: Monochrome or Color Interfaces: USB3 Vision or MIPI CSI-2

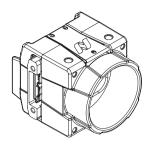
Lens mounts: C-Mount, CS-Mount, or S-Mount

Camera control: GenlCam, Video4Linux2 (V4L2), Direct Register Access (DRA)

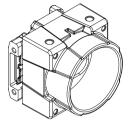
Benefits at a Glance

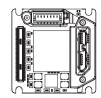
- Integrated on-board image processing
- Single board design
- Easy hardware and software integration
- Broad range of state-of-the-art sensors
- High-precision sensor alignment
- Cost optimized design

Multiple Housing Options

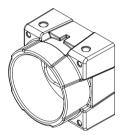


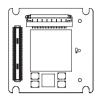
USB3 housings





CSI-2 housings





Alvium 1800 series cameras are available with various options for housing, lens mount, or direction of the USB connector.

One Platform, Infinite Solutions

The Alvium 1800 Series offers a range of options for migrating from PC-based machine vision to an embedded setup. The ALVIUM® Technology platform not only supports easy sensor and functionality upgrades within the Alvium world, but also makes it easy to switch from PC-based image processing applications to embedded systems thanks to common standards. To connect to the CSI-2 interface of Alvium 1800 Series cameras, Allied Vision provides open-source CSI-2 drivers on GitHub for different boards and systems-on-a-chip.

Allied Vision has partnered with NVIDIA to make industrial computer vision cameras and their benefits accessible to Jetson-based system designers through the Alvium Series of MIPI CSI-2 and USB3 Vision cameras. Thanks to the ALVIUM® Technology, prototyping and system integration have never been so easy and future system updates are more flexible. NVIDIA Jetson boards (Nano, TX2, Xavier NX, AGX Xavier) are supported with a common driver. Additional driver support includes the NXP i.mX6 and i.mX8 and we are constantly expanding our ecosystem.

From basic features to advanced functionalities in challenging conditions, the Alvium camera series is the platform of choice to exactly meet your requirements. The platform approach of the Alvium series makes it straightforward to replace or upgrade Alvium cameras with other models of the series.

Alvium can be easily used with our in-house Vimba SDK or with third party image-processing libraries. Allied Vision partners with all major software providers to ensure full compatibility of our SDK and easy integration of our cameras into your system.

Curious? Learn more about the Alvium Series and stay informed about latest releases of new models, sensors, features, and interfaces!

Grab the latest models at alliedvision.com/alvium

