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Allied Vision Alvium 1800 U-510m, 1/1.8" 5.1 S-Mount, USB 3.0 Monochrome Camera

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Allied Vision Alvium USB 3.1 Cameras



Stock #26-204 **1 In Stock**

⊖ 1 ⊕ **\$812⁰⁰**

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Spectrum:	
Monochrome	

General

Monochrome Camera	Type:
1800 U-510m	Model Number:
	Manufacturer:

Allied Vision

Camera Series:

Alvium

Physical & Mechanical Properties

Dimensions (mm):
29 x 29 x 33 (includes connectors and lens mount)

Weight (g):
65

Housing:
Full

Sensor

Image Buffer:
256KB

Sensor Format:
1/1.8"

Resolution (Megapixels):
5.10

Frame Rate (fps):
79.00

Pixels (H x V):
2,464 x 2,064

Pixel Size, H x V (µm):
2.74 x 2.74

Sensing Area, H x V (mm):
6.75 × 5.66

Imaging Sensor:
Sony IMX548

Type of Sensor:
Progressive Scan CMOS

Shutter Type:
Global

Pixel Depth:
12 bit

Exposure Time:
14µs - 10s

Machine Vision Standard:
USB3 Vision v1.0, GenICam

Electrical

Power Consumption (W):
3.0

Hardware & Interface Connectivity

Interface:
USB 3.0 Gen 1

Connector:
USB 3.0 Gen 1, Micro-B

Power Supply:
Power over USB or via GPIO

GPIOs:
4 Programmable TTL GPIOs

Synchronization:
Hardware Trigger (GPIO) or Software Trigger

Interface Port Orientation:
Back Panel

GPIO Connector Type:
7-pin JST

Threading & Mounting

Mount:
S-Mount (M12 x 0.5)

Mounting Threads:
1/4-20 and M6 with Tripod Mount Adapter [#14-156](#)

Environmental & Durability Factors

Operating Temperature (°C):
-20 to +65 (housing temperature)

Storage Temperature (°C):
-20 to +85

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Product Details

- Compact, Low Cost, High Performance Design for Machine Vision and Embedded Applications
- ALVUM® System on Chip (SoC) Technology with Onboard Imaging Preprocessing
- Up to 24.60 MegaPixels, 1.2" Sensor Format
- [Allied Vision Alvium Right Angle USB 3.1 Cameras](#) Also Available

Allied Vision Alvium USB 3.0 Cameras feature a lightweight compact form factor with ALVUM® System on Chip (SoC) technology, offering a comprehensive image processing library for advanced onboard image correction and preprocessing functions to relieve host computer and processor workload. In addition to smart camera operations, the unique SoC design also allows for low power consumption and ease of integration, making them ideal for next generation machine vision, robotics and embedded vision applications. The cameras feature a variety of popular Sony Pregius and On Semi CMOS sensors with high image quality, fast frame rate and USB3 Vision interface standard. The actively aligned lens mount minimizes inconsistency and variation. Allied Vision Alvium USB 3.0 Cameras feature a USB port on the back panel and are available in a variety of monochrome, color, and NIR configurations, including C-Mount, CS-Mount, and S-Mount. Full housing versions are best suited for prototyping, development and end user uses. Partial housing and board level configurations have exposed image sensor PCB without heat sinks to reduce space and facilitate system integration making them ideal for OEM embedded design.

Note: Board level versions do not have a lens mount.