

// Alvium UV Models

Compact high-resolution UV cameras



Camera Highlights

Allied Vision's Alvium UV cameras are the smallest industrial grade ultra-violet (UV) imaging devices on the market ideally suitable to build extremely compact OEM systems for embedded and machine vision applications. The four Alvium UV models incorporate the innovative 8.1 MP Sony Pregius S IMX487 CMOS sensor specially designed for the waveband between 200 nm to 400 nm. This makes them suitable for many industrial and scientific imaging applications in the near- and mid-UV range requiring high quality UV images with low noise at high resolution and frame rates. No matter which interface you choose the industrial-grade Alvium UV cameras provide you a plug & play feeling whenever setting up your machine vision applications beyond the visible - independent if it's based on a PC or embedded system.

Model	Interface	Sensor	Sensor size	Pixel Size	Resolution	Frame rate	Mass
Alvium 1800 C-812	MIPI CSI-2	IMX487	Type 2/3	2.74 μm x 2.74 μm	8.1 MP 2848 (H) x 2848 (V)	58 fps	40 g ⁽¹⁾
Alvium 1800 U-812	USB3					51 fps	65 g ⁽²⁾
Alvium G1-812	GigE					14 fps	65 g ⁽²⁾
Alvium G5-812	5GigE					58 fps	95 g ⁽²⁾

⁽¹⁾ Open housed version | ⁽²⁾ Closed housing option

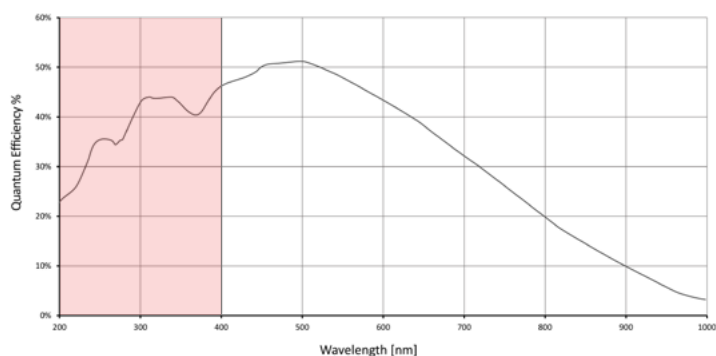
Benefits

- // Small form factor and low weight makes Alvium UV cameras ideally suitable for OEM system designs:
 - Compact closed housing with popular 29 mm x 29 mm footprint
 - Bare board version with a footprint of 26 mm x 26 mm only for most-compact system designs
- // Innovative, backside illuminated, global shutter UV CMOS sensor with industry's smallest pixels of only 2.74 μm provide you amazingly high UV sensitivity
- // High-precision sensor alignment at production time grants you a high accuracy of your inspection system
- // Fast frame rates and flexible ROI control options empower you to speed up processes on-demand
- // Many on-board firmware features simplify your efforts to capture high quality images and reduce the CPU load on the host system
- // **Removed Cover Glass (RCG)** order option enabling to achieve image artefact free imaging results in laser based applications

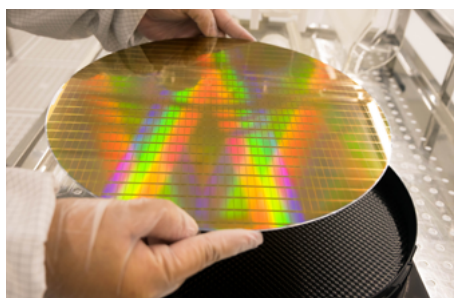
Operating Conditions

Power requirements	Power over Ethernet, USB 3.1, or MIPI CSI-2 interface; or external power
Power consumption	< 4.6 W - CSI-2 GigE USB3 < 7.6 W - 5 GigE
Operating temperature	-20°C to +65°C (housing)
Storage temperature	-20°C to +85°C (ambient)
Humidity	0% to 80% (non-condensing)
Regulations	Closed housing options: CE, FCC Class B, CAN ICES-3 (B) All options: RoHS

Absolute Quantum Efficiency



Applications



Alvium UV cameras with IMX487 are well-suited for many typical UV applications in various industries:

- Semiconductor industry: Mask and surface inspection
- Electronics industry: Quality inspection of resin coatings on PCBs
- Outdoor imaging: Infrastructure inspection of power lines or pantographs
- Factory automation: Inspection of micro-scratches on surfaces, as glass or metal
- Recycling industry: Material sorting of transparent plastics
- Laser beam profiling: Quality control and process optimization of lasers