

## 



## **Alvium** 1800 U-811m

- IMX546 CMOS sensor
- ALVIUM image processing
- USB3 Vision
- Various hardware options

Hardware option: Open Housing C-Mount Standard

Alvium 1800 U – Your entry into high-performance imaging

# Industrial USB cameras with attractive price-performance ratio

Alvium 1800 U-811 with Sony IMX546 runs 43.0 frames per second at 8.1 MP resolution.

Alvium 1800 U is your entry into high-performance imaging with ALVIUM<sup>®</sup> Technology for industrial applications. Equipped with the newest generation of sensors, these small and lightweight cameras deliver high image quality and frame rates at the best price-performance ratio. 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.

Easy software integration with Allied Vision's Vimba Suite and compatibility to the most popular third party image-processing libraries.

See the Alvium Cameras Hardware Options for lens mount and housing options, as well as the Customization and OEM Solutions webpage for additional options.

## Specifications

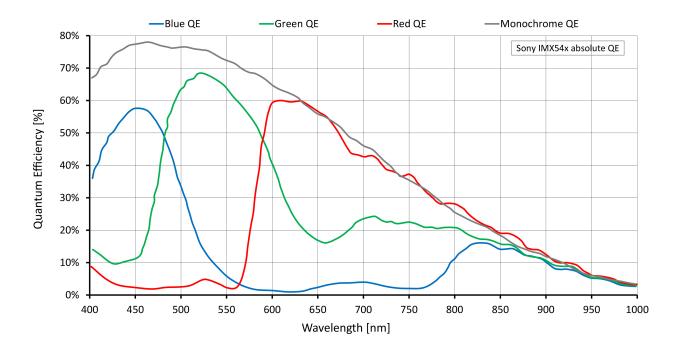
Alvium 1800 U-811m Open Housing C-Mount Standard				
Product code	15870			
Interface	USB3 Vision			
Resolution	2848 (H) × 2848 (V)			



Alvium 1800 U-811m Open Housing C-Mount Standard				
Spectral range	300 to 1100 nm			
Sensor	Sony IMX546			
Sensor type	CMOS			
Shutter mode	Global shutter			
Sensor size	Type 2/3			
Pixel size	2.74 μm × 2.74 μm			
Lens mount	C-Mount			
Max. frame rate at full resolution	43 fps at 375 MByte/s, Mono8			
ADC	12 Bit			
Image buffer (RAM)	256 KB			
Non-volatile memory (Flash)	1024 KB			
Output				
Bit depth	Max. 12 Bit			
Monochrome pixel formats	Mono8, Mono10, Mono10p, Mono12, Mono12p			
General purpose inputs/outputs (GPIOs)				
TTL I/Os	4 programmable GPIOs			
Operating conditions/dimensions				
Operating temperature	+5 °C to +65 °C (housing)			
Power requirements (DC)	Power over USB 3.1 Gen 1   External power 5.0 V			
Power consumption	USB power: 3.3 W (typical)   Ext. power: 3.5 W (typical)			
Mass	45 g			
Body dimensions (L × W × H in mm)	30 × 29 × 29			
Regulations	2011/65/EU, including amendment 2015/863/EU (RoHS)			



## Quantum efficiency



### Features

#### Image control

#### Auto control

- Auto exposure
- Auto gain
- Auto white balance (color models)
- Auto features regions control
- Auto features algorithms control

#### Other image controls

- Binning
- Black level
- Contrast
- De-Bayering up to 5×5 (color models)



- Exposure time
- Gain
- Gamma
- Hue (color models)
- Saturation (color models)
- DPC (factory calibrated)
- FPNC (factory calibrated)
- Region of interest (ROI)
- Reverse X/Y

#### Camera control

- Acquisition frame rate
- I/O and trigger control
- Temperature monitoring (sensor board)
- Status LED luminance control
- Firmware update in the field
- U3 Power Saving Mode

## Technical drawing



#### Camera hardware options

The Alvium Cameras Hardware Options document informs about submodels, such as bare board or open housing cameras with different lens mounts.



