Allied Vision

Alvium 1800 U
Alvium 1800 U-130 VSWIR

Alvium 1800 U-130 VSWIR innovative USB camera with Sony IMX990 SenSWIR InGaAs global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model:	Alvium 1800 U-130 VSWIR
Product series:	Alvium 1800 U
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono
Spectrum:	SWIR, Visible SWIR
Spectral range:	400 nm to 1700 nm
Resolution:	1,296 × 1,032 (1.30 MP)
Sensor model:	Sony IMX990 | InGaAs
Sensor architecture (material):	InGaAs
Shutter type(s):	Global Shutter
Sensor size:	8.15 mm ø (Type 1/2)
Pixel size:	5.00 µm × 5.00 µm

Pixel formats

Sensor bit depth:	8-bit, 10-bit, 12-bit; Adaptive (10-bit, 12-bit)
Monochrome pixel formats:	Mono8 (default), Mono10, Mono10p, Mono12, Mono12p

Timing and gain

Max. frame rate:	130 fps

I/Os and power

Non-isolated lines:	4 programmable GPIOs
Power supply:	Power over USB 3.1 Gen 1 | External power 5.0 V
Power consumption:	USB power: 2.1 W (typical) | Ext. power: 2.3 W (typical)

Operating conditions

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

Mechanical properties

Body dimensions (L x W x H in mm):	38 × 29 × 29
Lens mount(s):	C-Mount, CS-Mount, S-Mount
Weight:	65 g

On-board memory and FPGA

Image buffer (RAM):	256 KByte
Non-volatile memory (Flash):	1024 KByte

Interfaces

Digital interface:	usb3.0
Vision standard:	USB3 Vision

Sony IMX990, IMX991 absolute QE

29.6

13

4.3

20

M3 - 2.5 (2x)

29.4

24

29.4

24

M2 - 2 (4x)

C-Mount

38.2

7.9

5.7

11.5

⌀27.8

M2 - 2

8.5

9.1

10.5

18

M2 - 3.3 (2x)

33.2

13

13.4

20

3.5

M3 - 2.5 (2x)