

Most flexible

Hyperspectral Video Camera



FireflyEYE

V185

Real-time spectral imaging

Cubert's workhorse FireflyEYE S185 has received a main sensor update from the CCD technology to a modern CMOS sensor. As a result, the data quality and the speed of the camera improved a lot. The new V185 is available as 12-bit and 14-bit version, allowing even deeper analyses with minimal brightness values in each band.

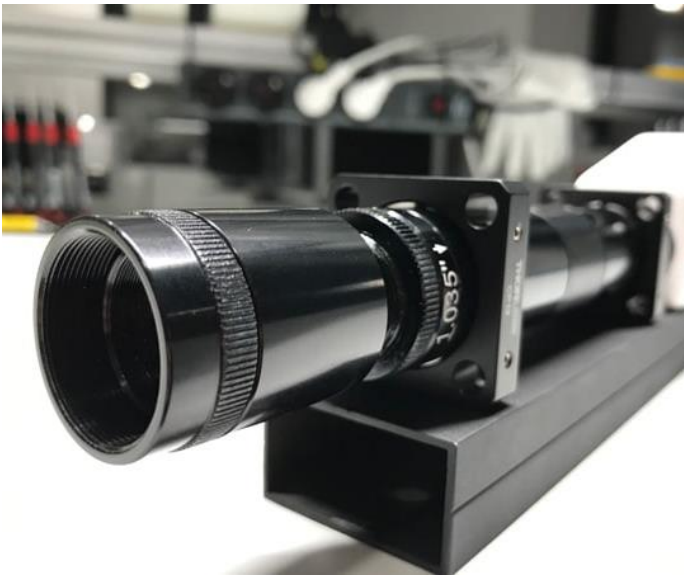
Thanks to the modern hardware architecture, a stable frame rate of 25 Hz can now be achieved with the 14-bit version. The 14-bit version has 2x higher signal-to-noise-ratio and 4x higher dynamic range compared to the S185.

Advantages

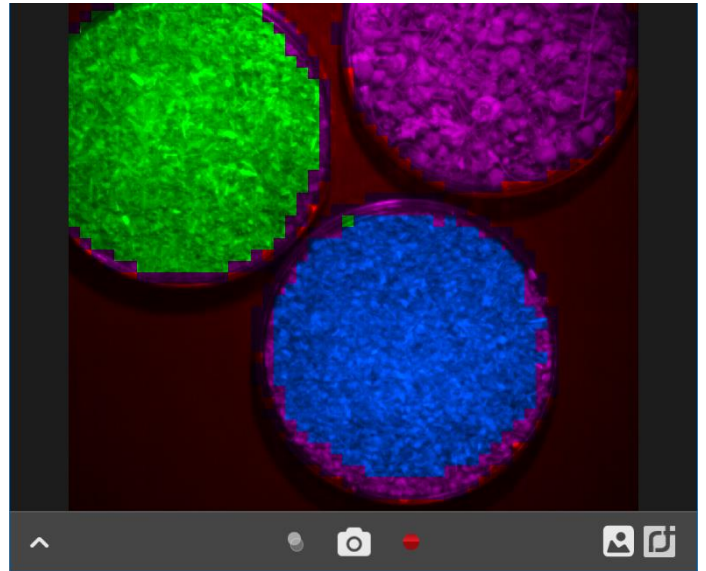
- 3D hyperspectral snapshot imager (x, y, λ)
- VNIR coverage (450-950 nm)
- 125 spectral bands
- 12-bit / 14-bit version
- 25 Hz max frame rate
- Compatible with microscopes

Video Spectroscopy





Firefly V185 with relay lens



Train the camera to identify distinct materials completely automatically

What you should know

The Firefly is providing full flexibility in diverse application fields. In lab use the Firefly can be equipped with **close-up lenses**, allowing a **macroscopic scale view** with a spot size of only a few **mm to cm**.

Attaching a **relay lens** to the Firefly provides for full interchangeability to C-mount lenses. Mount the camera on your **microscope or endoscope** without the need of an additional calibration.

An **industrial housing** with IP65 is available to ensure a high robustness for the V185. Upgrade to IP68 and use the V185 **underwater** to a depth of 5m.

TECHNICAL SPECIFICATIONS FIREFLYE V185

Technology	Multipoint Spectrometer
Number of Sensors	2
Wavelength Range	450 – 950 nm
Spectral Bands	125
Spectral Sampling	4 nm
Spectral Resolution (FWHM)	8 nm @ 532 nm
Spatial Resolution	50 x 50 pixel
Spatial Resolution 2 nd Sensor	1000 x 1000 pixel
Total Spectra / Image	2500

Total Data Points / Cube	0.3 Million
Data Depths	12 bit / 14 bit
Readout	Global shutter
Max Frame Rate	25 Hz
Integration Time	0.1 – 1000 ms
Field of View (FOV)	30°, 20°, 13°, 7°, lens selectable
Power Consumption	7 W
Data Link	2 GigE
Weight	490 g
Size	200 x 67 x 60 mm