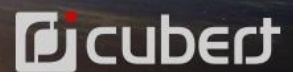


ULTRIS

UV-VIS-NIR

Hyperspectral Video Camera



Introducing the ULTRIS X20

The award-nominated 3D hyperspectral light field cameras ULTRIS 20 and ULTRIS 20 Plus have been upgraded to include a wavelength range of 350-1000nm enabling UV-VIS-NIR coverage.

Building on the success of the ULTRIS 20 and ULTRIS 20 Plus, the **ULTRIS X20** expands the wavelength range from 450-850nm to **350-1000nm**, thereby including the UV spectrum and making UV-VIS-NIR coverage possible.

With a constant FWHM of 10nm across all channels, over 160 spectral bands compared to the previous 100 plus, and a native image resolution of 410x410 pixels (combined with the pan sensor on the **ULTRIS X20 Plus** model over 1800x1800 pixels is possible), the ULTRIS X20 takes hyperspectral imaging to new heights, enabling even more applications.

Small and lightweight (under 350 grams), and with over 3200 lines per second - a speed equivalent to a push-broom camera - the ULTRIS X20 remains perfectly suited to UAV mapping applications, amongst others.

ULTRIS X20 X20 Plus

Advantages

- 3D hyperspectral snapshot imager (x, y, λ)
- 350 – 1000nm (UV-VIS-NIR)
- >160 bands
- 410 x 410 pixel (ULTRIS X20)
- 1880 x 1880 pixel (ULTRIS X20 Plus)





ULTRIS X20



ULTRIS X20 Plus

What you should know

With its mass of less than 350g, the camera is perfectly suited for any application from **lab to UAV**. The **ULTRIS X20 Plus** additionally involves a second camera sensor, providing a much higher resolution through pansharping, an image fusion technique to increase the spatial resolution. This model weighs 630g, making it also easily accessible for UAVs.

To meet the requirements of harsh industrial environment, a special **ruggedized housing** is available with IP65, ensuring a high robustness. Upgrade the ULTRIS X20 to waterproof IP68 and use it **underwater** to a depth of 10m.

TECHNICAL SPECIFICATIONS

ULTRIS X20 – ULTRIS X20 PLUS

Technology	Light Field
Number of Sensors	1 2 (X20 Plus)
Wavelength Range	350 – 1000 nm
Spectral Bands	164
Spectral Sampling	4 nm
Spectral Resolution (FWHM)	Constant 10 nm
Spatial Resolution	410 x 410 pixel
Spatial Resolution 2 nd Sensor	1880 x 1880 pixel (X20 Plus)
Total Spectra / Image	168 000

Total Data Points / Cube	27 Million
Data Depths	12 bit
Readout	Global shutter
Max Frame Rate	8 Hz
Integration Time	0.1 – 1000 ms
Field of View (FOV)	35°
Power Consumption	8 W
Data Link	1-2 GigE
Weight	350 g 630 g (X20 Plus)
Size	60 x 60 x 57 mm 60 x 107 x 95 mm X20 Plus)