



UV-VIS-NIR

Light Field-based Hyperspectral Video Camera



ULTRIS X20

Welcome to the future of hyperspectral camera technology

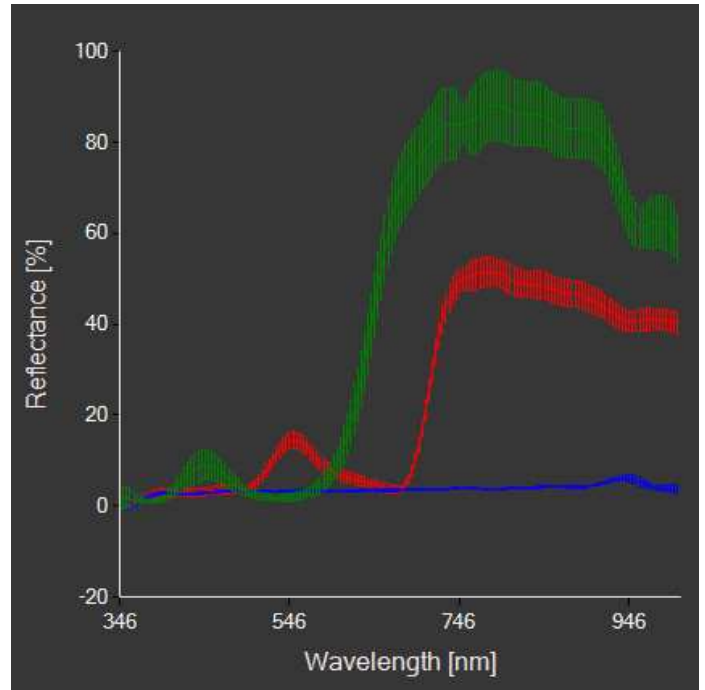
With its wavelength range of 350-1000nm, covered in 164 spectral bands, and its native image resolution of 410 x 410 pixels, the ULTRIS X20 continues Cubert's ground-breaking development of extremely precise, light field-based hyperspectral snapshot cameras. This range makes it the world's very first UV-VIS-NIR hyperspectral video imager. The X20 produces rich, 3D data cubes in real-time with no need for scanning (like push-broom technology) or image combination after fast filter shifts.

Advantages

- 20 MP hyperspectral video camera (x, y, λ)
- 350 – 1000nm (UV-VIS-NIR)
- 164 spectral bands
- 410 x 410 px spatial resolution
- Award-winning camera



ULTRIS X20 – Colored Infrared Image in native resolution showing the high quality



Clear spectral output of whole image regions, allowing precise analyses

TECHNICAL SPECIFICATIONS

ULTRIS X20

Technology	Light Field
Wavelength Range	350 – 1000 nm
Spectral Bands	164
Spectral Sampling	4 nm
Spectral Resolution (FWHM)	Constant 10 nm
Spatial Resolution	410 x 410 pixel
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
Size	60 x 60 x 57 mm

Highly adaptable technology

The ULTRIS X20 is Cubert's premium product ranging from ultraviolet up to near infrared, and covering a wide range of possible applications. Enabling an unprecedented resolution, both spectrally and spatially, and a working speed that is unmatched, the hyperspectral light field basis provides powerful technology that can easily be adapted to customer's wishes. We encourage our customers to ask for specific solutions, from changes in the band setting to the maximum resolution, the technology can be adapted without much effort. Even changing the wavelength range to the SWIR region is possible now, thanks to new sensor developments on the market..

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.