Next-Gen High Resolution

ULTRIS XM

1 Megapixel & Flexible Filter Options

The **ULTRIS XM** represents the next generation in hyperspectral imaging, featuring **USB3 connectivity** for easy data transfer capabilities. Coming with the highest-ever native **spatial resolution of 1 Megapixel** among Cubert hyperspectral snapshot cameras. Operating as a classic VNIR camera, it covers the spectrum from 400 to 900 nm, making it versatile for various applications.

This technology provides clean hyperspectral images, right out of the box with a native image resolution of **1000 × 1000 spatial pixels with 51 spectral bands**, resulting in 51 M spectra per frame. Additionally, a **C-Mount adapter** provides users with flexibility in selecting lenses based on their specific needs, or even mounting the camera on other optical systems such as microscopes.

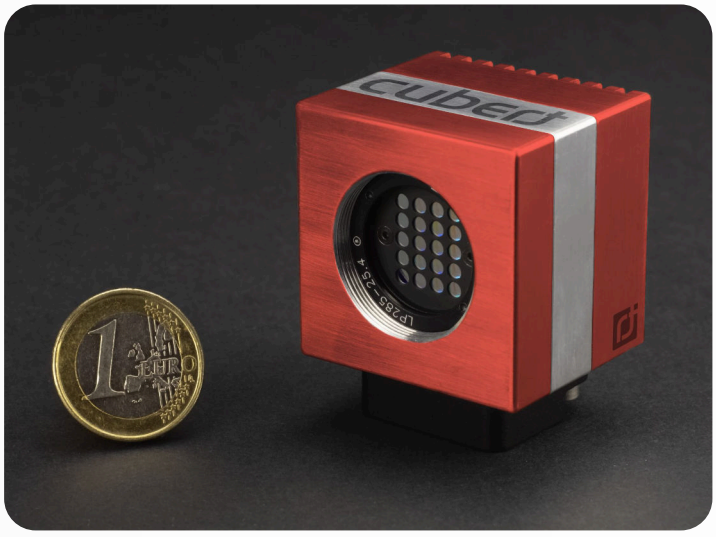
Technical Specifications ULTRIS XM

Technology	Light Field	Attachable Optics	C-Mount (for 1" sensors)
Readout	Global Shutter	FOV (Field of View)	12° / any (lens-dependent)
Spatial Resolution	1000 x 1000 pixel	Data Depth	12 bit
Wavelength Range	400 - 900 nm / modular	Max Frame Rate	10 Hz
Spectral Bands	51	Data Link	USB 3.0
Spectral Sampling	10 nm	Sensor	Sony IMX540
FWHM	Constant 25 nm	File size processed	~150 MB
Spectral Data Points	51 x 1 000 000 (51 M)	Weight	<150 g
Bandpass Filter	Mosaic	Dimensions	40 x 40 x 40 mm
Integration Time	0.1 – 1000 ms	Variants	Relay Lens Adapter

Choose your Wavelength

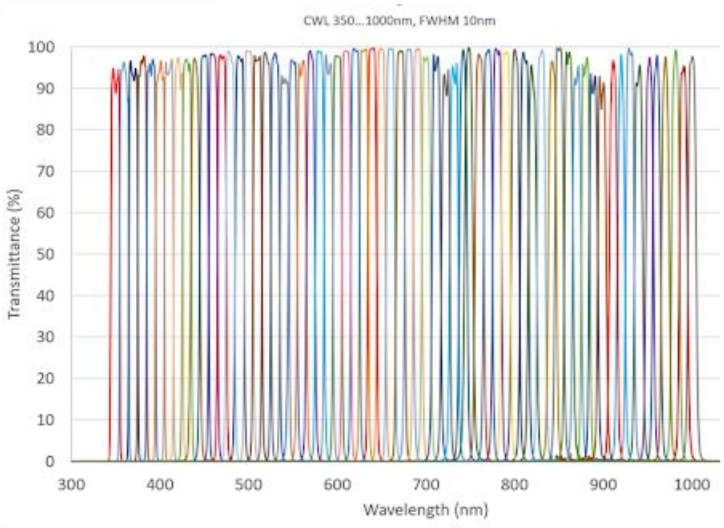
The ULTRIS XM represents a significant advancement in hyperspectral imaging, incorporating **mosaic optical bandpass filters** with a **FWHM of 25 nm**. This configuration provides a **standard wavelength range of 400-900 nm**, suitable for a wide range of applications requiring accurate spectral data acquisition.

Unique to the ULTRIS XM is the selection of fixed **filter configurations available** at the time of purchase, tailored to meet diverse application needs. The camera can be equipped with an **alternative set of 25 nm FWHM filters**. These filters allow a **custom 500 nm range** within the entire VNIR spectrum covering 385 to 1000 nm. This feature provides flexibility in targeting specific spectral regions for detailed analysis.



Compatible with the X20

Furthermore, the **ULTRIS XM** can be configured to incorporate the filter set from the premium model **ULTRIS X20**. These filters have a narrower **FWHM of 10 nm** (image below), offering enhanced resolution for high-precision spectral analysis. While the wavelength coverage with the X20 filters is limited to a **200 nm range within 350-1000 nm**, the finer spectral resolution is beneficial for specialized scientific applications.



In summary, the ULTRIS XM provides a robust and versatile hyperspectral imaging solution with **fixed filter options**. Whether equipped with the standard 25 nm FWHM filters or the high-resolution 10 nm FWHM filters from the ULTRIS X20, the camera is designed to meet diverse scientific and industrial imaging requirements with precision and reliability.

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VIDEO SPECTROSCOPY

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Need more information?

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