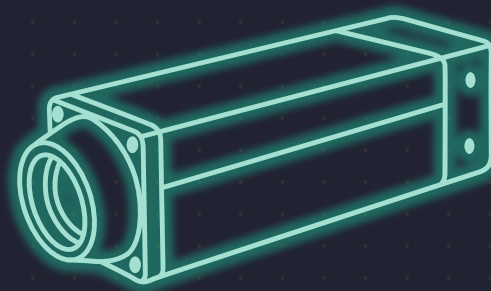


ULTRIS XMR



Expanding Human Vision

HIGH-RESOLUTION SNAPSHOT IMAGING

The ULTRIS XMR captures 61 spectral bands simultaneously at 1-megapixel spatial resolution. Covering the VIS-NIR range from 430 to 910 nm, it combines detailed spatial information with a full spectrum at every pixel. Snapshot acquisition requires no scanning, making the XMR suitable for static as well as dynamic scenes.

61

Spectral Channels

1 MP

Spatial Resolution

FROM RESEARCH TO APPLICATION

With high spatial resolution, snapshot acquisition and different optical configurations, the XMR covers a wide range of imaging tasks. Applications range from industrial inspection and quantitative measurement to laboratory research and biomedical imaging. Flexible optical integration also enables the XMR to be combined with external optics and imaging systems.

430-910 NM

Wavelength Range

12/17 HZ

Live at 12/8 bit

Technical Specifications Ultris XMR

Imaging		Spectral & System	
Technology	Light Field	Wavelength Range	430-910 nm
Readout	Global Shutter	Spectral Channels	61
Spatial Resolution	1 MP	Spectral Sampling	8 nm
Field of View	60°/31°/15° (lens-dependent)	FWHM	Constant 25 nm
Attachable Optics	C-mount 4/3"	Bandpass Filter	Mosaic
Integration Time	0.1-10,000 ms	Spectral Data Points	61 × 1,080,000 (65.9 M)
Max Frame Rate	11 Hz (12 bit) · 17 Hz (8 bit)	Data Link	USB 3.1 Micro-B
Data Depth	8/12 bit	File size, snapshot	357.4 MB
Sensor	Sony IMX540	Weight · Dimensions	700 g · 40 × 40 × 217 mm



The ULTRIS XMR on the Cubert Knowledge Base.

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SPECTRAL INFORMATION BEYOND RGB

The XMR provides a complete spectral image in every snapshot. This makes it possible to work with information beyond conventional red, green and blue – whether the task is material differentiation, quantitative measurement, classification or spectral analysis.

With Cuvis.AI, spectral data can also be combined with modern computer vision and machine-learning methods. Relevant spectral information can be identified and used to build processing and classification workflows for specific applications.



Vine leaves in false colour. With 61 spectral channels at 1-megapixel spatial resolution, the XMR combines spectral differentiation with detailed spatial information.

FLEXIBLE OPTICAL INTEGRATION

Different optical configurations allow the XMR to be adapted to field of view, working distance and application. For setups requiring external optics, the XMR-GPD provides flexible C-mount integration for applications including microscopy, endoscopy and other optical imaging systems.

Snapshot Acquisition

All 61 spectral channels are acquired simultaneously, without mechanical scanning. This reduces motion between spectral bands and enables spectral imaging of moving objects and changing scenes at up to 17 frames per second.

From Spectrum to Application

The XMR can provide the complete spectral information for an application and help determine which wavelengths actually matter. Depending on the task, this information can be used directly for spectral analysis or processed further with CUVIS and Cuvis.AI.

Variants

XMR-vnr-12 (12.5 mm, 60°) · XMR-vnr-25 (25.5 mm, 31°) ·
XMR-vnr-50 (50 mm, 15°) · XMR-GPD (any C-mount optics)

