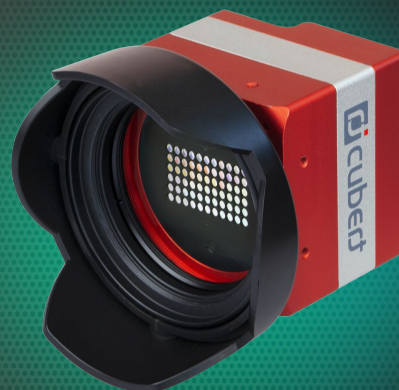# Meet the Hyperspectral Experts

At Cubert, we specialize in **Hyperspectral Snapshot technology**, offering high-performance cameras tailored to diverse fields such as **OEM integration, scientific research, security**, and **biomedical imaging**.

Our portfolio includes a range of powerful cameras designed for precise data capture and analysis, ensuring you get the most reliable results.

Each camera is supported by our proprietary **software SDK**, enabling seamless integration into your systems and providing developers the tools needed for advanced applications.
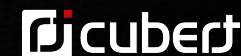
ULTRIS X20

ULTRIS X20 Plus

ULTRIS 5

ULTRIS XMR

ULTRIS SWIR 1

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VIDEO SPECTROSCOPY

Need more information?

Please contact us! We'd be delighted to answer any of your questions you may have.

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DORGEAN
Beijing Dorgean Electronic Technology Co.,Ltd

Instrument Expert
Original factory packaging
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Technical Specifications Overview

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	ULTRIS 5	ULTRIS X20 / X20 Plus	ULTRIS XMR	ULTRIS SWIR 1
	Entry / OEM Camera	**Premium UV-VIS-NIR Camera**	**Next-Gen HR Camera**	**Hyperspectral SWIR Camera**
Applications	Science on a budget, OEM (food, quality control), medical (skin, brain, surgery), compatible with medical imaging devices)	Remote sensing, field and UAV use, scientific research, reference model for exploring wavelengths in industrial applications	Real-time tracking, monitoring, and security-related tasks, chemical imaging across multiple fields,medical (skin, brain, surgery), compatible with medical imaging devices)	All SWIR applications, from remote sensing to industrial quality control, even medical imaging (e.g., detecting water content/humidity in vegetation or soil)
Key Features	Most versatile, available with relay lens, high-speed version (75 fps) for fast processes.	Highest quality, X20 Plus adds a high-resolution panchromatic sensor, ideal for UAV aerial imaging. Pansharpening for improved spatial resolution.	Next-gen camera with 17 fps, powered via USB3, offering the highest spectral resolution of the lineup. Easy to use with integrated relay lens, also suited for large telephoto lenses.	First hyperspectral snapshot SWIR camera, extremely fast (80 fps), USB3 connection. Ideal for industries requiring SWIR imaging, pioneering a new standard in the SWIR spectrum.
Price Range	Entry-level	Premium	Mid-range	Mid-range
Wavelength Range	450 - 850 nm	350 - 1000 nm	430 - 910 nm	980 - 1650 nm
Spectral Bands	51	164	61	38
Spectral Sampling	8 nm	4 nm	8 nm	18 nm
FWHM	26 nm @ 532 nm	Constant 10 nm	Constant 25 nm	Avg. 80 nm
Bandpass Filter	LVF	Mosaic	Mosaic	LVF
Spatial Resolution	290 x 275 pixel	410 x 410 pixel, X20P: 1886 x 1886 pixel (Pan)	1000 x 1000 pixel	200 x 200 pixel
Total Data Points	51 x 79 750 (4M)	164 x 168 100 (24.5M)	61 x 1 000 000 (61M)	38 x 40 000 (1.5M)
Lens / Optics	C-mount 2/3"	-	C-mount 4/3"	C-mount 2/3", 1"
FOV (Field of View)	15° (w/o lens) / lens-dependent	35°	lens-dependent	lens-dependent
Max Frame Rate	15 Hz / 75 Hz (HFR)	max 4 Hz	17 Hz (8 bit) / 12 Hz (12 bit)	80 Hz
Data Link	GigE / 10 GigE (HFR)	GigE	USB 3.0	USB 3.0
Integration Time	0.1 – 1000 ms	0.1 – 1000 ms	0.1 – 1000 ms	0.1 – 1000 ms
Data Depth	12 bit	12 bit	12 bit	12 bit
Technology	Light Field	Light Field, Dual Sensor (X20P)	Light Field	Light Field
Readout	Global Shutter	Global Shutter	Global Shutter	Global Shutter
Sensor	Sony IMX264	CMOSIS CMV20000, Sony IMX264 (X20P)	Sony IMX540	Sony IMX990
File size processed	< 8 MB	< 55 MB	~300 MB	3 MB
Weight	126 g	350 g / 630 g	700 g	140 g (w/o lens)
Dimensions	29 x 29 x 65 mm	60 x 60 x 57 mm / 86 x 121 x 105 mm (X20P)	40 x 40 x 217 mm	30 x 30 x 85 mm (w/o lens)
Options	C-mount adapter High Frame Rate (HFR) Industrial Housing (IP66)	only X20: Industrial Housing (IP66) Underwater Housing (IP68)	Wavelength range customizable	-