



INTELLIGENCE IN A NEW DIMENSION: REAL-TIME. SPECTRAL. SOVEREIGN.









# Cubert is a German Pioneer in Real-time Hyperspectral Imaging

Our snapshot cameras capture the full optical spectrum in a single exposure – no scanning, no compromises. Built for environments where vision alone isn't enough, we deliver spectral video data that is robust, tactically actionable, and ITAR-free.

Our systems are integrated into UAVs, ground stations, vehicles, and mobile platforms – and are deployed worldwide by institutions, research facilities, and government agencies in mission-critical applications such as reconnaissance and surveillance:

- Anomaly detection from UAVs or manned platforms
- ☐ Live tracking of objects with known spectral signatures
- Identification of materials not distinguishable by RGB or thermal imaging

# Hyperspectral Intelligence Without Compromise – Powerful, Ready, Integrable

- Snapshot Technology Full spectral cube in a single exposure
- Real-Time Capable Up to 75 fps, live data analysis
- □ VNIR & SWIR More than 100 channels across visible and infrared ranges (350–1650 nm)
- Lightweight & Rugged From 140 g, UAV-optimized
- Open & Integrable USB 3.0, GigE, SDK, DJI-compatible
- ☐ ITAR-Free Ready to deploy, globally available
- Made in Germany Development, production, support from one source



Cubert delivers Spectral Intelligence – Precise, Mobile, Mission-ready.



The Cubert ULTRIS X20P system is engineered specifically for UAV-based missions: A 20-megapixel hyperspectral sensor combined with a panchromatic camera for high resolution and real-time onboard processing via edge PC. Data is automatically georeferenced, analyzed, and made actionable in the field.

Seamless DJI Skyport integration and a stabilized UXG gimbal ensure reliable performance, even in harsh conditions. Together with CUVIS software, it forms a complete workflow – from flight planning to spectral decision-making. With reliable performance under demanding conditions, the ULTRIS X20P supports decision-making in defense-critical scenarios – from reconnaissance to threat detection.

## Our Camera Products ULTRIS 55

Camera Model	Spectral Range	Spectral Bands	Spatial Resolution	Frame Rate	Weight
ULTRIS 55	450 - 850 nm	51	290 x 275 px	75 Hz	126 g
ULTRIS X20	350 - 1000 nm	164	410 x 410 px	8 Hz	350 g
ULTRIS X20P	350 - 1000 nm	164	1886 x 1886 px	4 Hz	630 g
ULTRIS XMR	430 - 910 nm	61	1000 x 1000 px	17 Hz	700 g
ULTRIS SWIR-1	980 - 1650 nm	38	200 x 200 px	80 Hz	140 g

# One Technology – Multiple Domains of Application

## **BIOMEDICAL & SCIENCE**

- □ Non-invasive diagnostics of skin and tissue
- Retina imaging for early detection of neurodegenerative diseases
- ☐ Hyperspectral microscopy in pharmaceuticals and cell biology
- ☐ Phenotyping and basic research at academic institutions

#### **ENVIRONMENT & AGRICULTURE**

- □ UAV-based monitoring of vegetation and crops
- Analysis of soil moisture, water and nutrient distribution
- □ CO₂ and biomass mapping for forestry and climate research

## INDUSTRY & OEM

- ☐ Inline quality control in food, pharma, recycling, and raw materials industries
- Detection of surface properties, coatings, moisture, and contamination
- ☐ Integration into automation, robotics, and inspection systems





**ULTRIS X20P** 



**ULTRIS XMR** 



**ULTRIS SWIR-1** 





#### **Cubert GmbH**

Science Park II Lise-Meitner Straße 8/1 D-89081 Ulm Germany

#### Need more information?

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

© +49 791 708 156 70

sales@cubert-gmbh.de

www.cubert-hyperspectral.com

