Product Brief: Development Kit
Bringing Spectral Information to Computer Vision

Spectral imaging at video speeds

Image with more information and speed than previously possible.
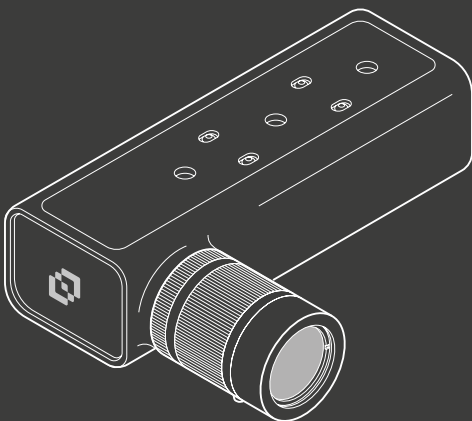
All-in-one solution

Portable camera with the compute power and tools to capture and analyze spatial-spectral information.
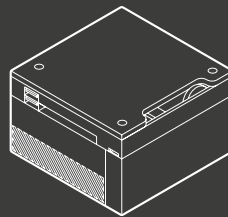
Developer ready

Familiar software tools for computer vision engineers to exploit spectral information in their applications.
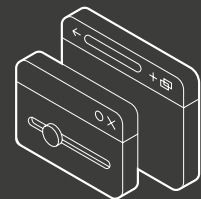

Camera

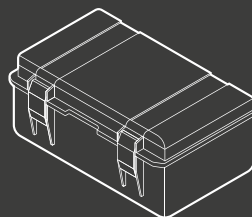Imaging and VIS-NIR spectral sampling at video speeds.

Edge Compute

The GPU processing power for realtime spatial-spectral data processing.
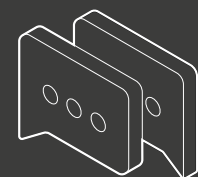
Software Development Kit

Tools, API, examples and tutorials.

Field kit accessories

Waterproof carry case, battery, external data storage and tripod mounting.

Support

Helping you on your computer vision journey.

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Specifications

Feature	Value	Notes
Camera		
Spatial samples	5M pixels	
Field of view (FOV)	6-29°	Selectable
Spectral samples	4k	High spatial accuracy samples in the FOV
Wavelength range	440-900nm	VIS-NIR bandwidth
Wavelength bands	96	For each spectral sample
Wavelength FWHM	8-20nm	Wavelength dependent
Bit depth	12 bit	Raw sensor pixel data
Frame rate	30 fps	Max data capture rate
Size	207mm × 84mm × 57mm	Camera excluding lens
Weight	< 1kg	Camera excluding lens
Interface	Dual FAKRA coaxial RF and 5m cables	Combined data and power
Edge Compute		
Type	NVIDIA® Jetson AGX Orin™	
OS	Ubuntu 20.04	
Storage	2TB NVMe SSD + 64GB eMMC	
Camera interface card	Dual FAKRA coaxial RF	Card installed on the Orin MIPI CSI-2 connector
Networking	RJ45 10GbE 802.11 Wi-Fi	
Size	110mm × 110mm × 84mm	
Weight	0.9kg	
Power	15-60W	Jetson AGX Orin
Software Development Kit (SDK)		
Tools	Camera control, data acquisition and processing	
API	Application programmers interface	
Examples	Examples and tutorials	
Field kit accessories (optional)		
Waterproof carry case	Pelicase IM2400	
Battery	88Whr providing > 2 hours typical operation	
External storage	2TB SSD	
Mounting	Tripod and arca-swiss quick release plate	

About Living Optics

Living Optics is on a mission to make hyperspectral imaging widely accessible. Our pioneering technology captures data inaccessible to the human eye and conventional cameras and delivers information in an affordable and portable solution for a diverse range of industrial and consumer applications.

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