

The **OCI™("All Seeing Eye")-F Series** camera is a miniaturized push-broom hyperspectral camera covering the full VIS-NIR (400-1000nm) wavelength range, with a SuperSpeed USB 3.0 interface. It features ultra-compactness (~ 16 cm x 5 cm x 7 cm) and light weight (~ 490 g) with fast data transfer rates (up to 50 fps). As an innovative "true push-broom" imager: one can simply move the imager by hand or move the sample to finish the scan. Independent on a constant scanning speed, the OCI-F Series offers versatility on various platforms such as UAVs with perfect hyperspectral image stitching. Compactness, fast imaging, simple operation, and intuitive software make the OCI-F, the choice for first-time practitioners and old-pros alike. They're Ideal for applications such as precision agriculture, remote sensing, conveyor sorting, forensics and other airborne applications.



**OCI-F** hyperspectral camera with standard lens.  
Easy mounting on UAV's, tripods, pan/tilt's and gimbals. Total weight ~ 490 g

## KEY FEATURES:

- Full VIS-NIR coverage (400-1000 nm) and SWIR (900-1700nm)
- Real-time sample preview
- Extremely compact and light-weight
- No moving parts, high reliability
- "True push-broom" scanning with random speed
- Easy integration on a variety of platforms
- Eliminates costly GPS/INS orthorectification post processing
- Yields distortion-free hyperspectral band images
- Multiple models to fit your budget.

## Applications:

- ▶ Precision Agriculture
- ▶ Food Quality
- ▶ Sorting
- ▶ Airborne Mini UAV
- ▶ Remote Sensing
- ▶ Process Control
- ▶ Anti-Counterfeiting
- ▶ Biomedical Diagnostics
- ▶ Forensics
- ▶ Pharmaceuticals
- ▶ Security/Defense
- ▶ Counterfeit Detection
- ▶ Oceanography
- ▶ Forestry

## About BaySpec, Inc.

BaySpec, Inc., founded in 2000 with 100% manufacturing in the USA (San Jose, California), is a vertically integrated spectral sensing company. The company designs, manufactures and markets advanced spectral instruments, from UV-NIR spectrometers, fiber sensing interrogators, bench-top and portable NIR and Raman analyzers, Hyperspectral imagers to portable Mass Spec for the biomedical, pharmaceuticals, chemical, food, semiconductor, homeland security/defense, and optical telecommunication industries.

	Specifications	
Operation Mode	Push-broom	
Number of Spectral Bands	<b>OCI-FL:</b> 400-1000 nm, 60 bands	
	<b>OCI-F:</b> 400-1000 nm, 120 bands	
	<b>OCI-F-HR:</b> 400-1000 nm, 240 bands	
	<b>OCI-F-SWIR:</b> 900-1700 nm, 80 bands	
Spectral Range	400 - 1000 nm	900 - 1700 nm
Spectral Resolution	<b>OCI-FL:</b> ~ 10-12 nm FWHM	<b>OCI-F-SWIR:</b> ~ 10 nm FWHM
	<b>OCI-F:</b> ~ 5-7 nm FWHM	
	<b>OCI-F-HR:</b> ~ 3 nm FWHM	
Spatial Pixels	800 px X scan-length	250 px X scan-length
Standard Lens <sup>1</sup>	16 mm (21° FOV)	16 mm (28° FOV)
Exposure Time	20 μs - 1 s	
Wavelength Calibration	Factory calibrated (calibration fixed permanently)	
Objective Lens Interface	C-mount	
Frame Rate	Up to 50 frames/sec	
Software	3 Module Suite – SpecGrabber, CubeCreator & CubeStitcher	
Data Format	Hyperspectral cube (ENVI-BSQ), Color image (BMP), Band image (BMP), ROI spectra (CSV format) and RAW (pixel data only)	
Operating Temperature	0°C to 50°C	
Power Consumption	< 3 W (USB 3.0 power)	
Weight	~ 490 g (including standard lens)	
Size	~16 cm x 5 cm x 7 cm (including standard lens)	
Camera Interface	USB 3.0	

1. Specifications subject to change without notice.
2. Other lenses available, please inquire.

