

Pervasive Spectroscopy

BAYSPEC OCI™-M+ Multispectral Imager with UAV - Ready to Fly Package for Aerial Imaging

The OCI™-M+, a push broom multispectral imager, is specifically designed for aerial imaging, featuring a light weight camera with The aerial imager *OCI™*-M+ comes with 12 selective bands including 3 RGB bands, and 9 spectral bands from red edge to NIR, that are most commonly used for precision agriculture. This imager is fully integrated with DJI Inspire 2 UAV allowing the maximum field coverage with high spatial resolution (4000 spatial pixels). An intuitive ground control software is also provided for automated waypoints flying. Fully integrated and easy to operate, the OCI-M+ UAV ready to fly package has made aerial imaging process very straightforward, and is ideal for applications such as precision agriculture, remote sensing, and geological survey.

Applications:

- Precision Agriculture
- Airborne Mini UAV
- **Remote Sensing**
- Security
- **Material Detection**
- Geological survey



KEY FEATURES:

- Extreme compact and light-weight
- No moving parts, high reliability
- Scanning with random speed for "true push-broom"
- Innovative non-slit design significantly reduces system complexity, featuring with real-time preview
- Effortless system integration
- Faster scanning with a wide-angle lens

About BaySpec, Inc.

BaySpec, Inc., founded in 1999 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-VIS spectrometers, bench-top and portable NIR and Raman analyzers, Hyperspectral imagers to confocal Raman microscopes, for the biomedical, pharmaceuticals, chemical, food, semiconductor, homeland security, and the optical telecommunications industries.





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	Camera Specifications ¹
Operation Mode	Push-broom
Spectral Range	450-1000 nm
Number of Spectral Bands	12
Spectral Bands	Blue: 470 nm Green: 560 nm Red: 660 nm Red Edge: 690 nm, 720 nm, 760 nm, 780 nm, 800 nm Near-Infrared: 820 nm, 840 nm, 900 nm, 970 nm
Spectral Bandwidth	~6 nm FWHM
Spatial Pixels	Up to 3956 X scan-length
Standard Lens	45 mm (17° FOV)
Exposure Time	20 μs - 1 s
Wavelength Calibration	Factory calibrated (calibration fixed permanently)
Bit Depth	12-bit
Frame Rate	20 frames/sec
Data Format	ENVI-BSQ for hyper-cube, BMP band image, ROI spectra, and RAW (pixel data)
Operating Temperature	-10°C to 40°C
Weight	460 g (with standard lens)
Size	8.5 cm x 6 cm x 6 cm (including standard lens)
	UAV Specifications
UAV	DJI Inspire 2
Flying Time	22 minutes
Accessories Included	Remote Controller, Flight Battery (2), Battery Charger, CineSSD & Station (480 GB)
	Software Included
	Waypoints flying software, BaySpec CubeCreator, BaySpec CubeStitcher

¹ Specifications subject to change without notice.







