OCI™-1000B150 Hyperspectral Camera

Full wavelength-range hyperspectral imaging at your finger tips

The ***OCI™*-1000B150** hyperspectral camera (OCI is a phonetic spelling of "All Seeing Eye") are innovatively designed, combining high-performance with ultra-compactness and simplicity in operation. It is ideal for use as a bench-top setup, on unmanned aerial vehicles/systems (UAV/UAS), or remotely operated vehicles (ROV). Packed with a high-performance, miniature single-board-computer, they acquire full VIS-NIR hyperspectral data with continuous spectral and spatial coverage. Operating of the camera is automatic and requires minimal intervention. The camera features signification reduction in size (camera only 3cm x 3cm x 3cm and weight (45.3g), and faster data transfer rate (up to 120 fps) with automatic data capturing and processing. Unlike conventional hyperspectral imagers that rely on intensive software effort on hyperspectral image cube construction, the innovative design of the OCI-1000B150 features “True Push-broom” – imagers can move to scan at random speeds. These innovations significantly reduce the requirements on UAV system, so that integration is almost effortless for many UAV/ROVs. BaySpec also provides ready-to-fly hyperspectral total solutions. Extreme compactness with uncompromised performance, automatic operation and data processing make the OCI a straightforward system for applications such as precision agriculture and remote sensing.

Applications:

- Precision Agriculture
- Airborne Mini UAV/ROV
- Remote Sensing
- Ground Survey
- Forest Survey
- Environmental Studies
- Law Enforcements
- Forensics
- Security and Defense
- Mining and Geology
- Oil and Gas Exploration
- Ocean Monitoring

OCI-1000B150 hyperspectral camera with and enclosure for gimbal mounting. 117 g.

OCI-1000B150 ready-to-fly system

KEY FEATURES:

- Extremely compact, flexible and easy to use
- Fast data rate up to 120 frames per second
- Innovative full-frame, non-slit design significantly reduces system complexity
- No GPS/IMU needed for ground image reconstruction
- Real-time ground image preview
- Ready-to-fly system with automatic control software available

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-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.

BaySpec, Inc.
1101 McKay Drive
San Jose, CA 95131
USA

Tel: +1 (408) 512-5928
Fax: +1 (408) 512-5929
Web: www.bayspec.com
Email: sales@bayspec.com

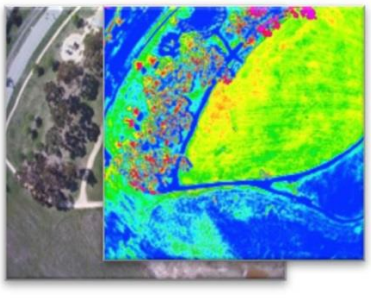
OCI™-1000B150 Hyperspectral Camera

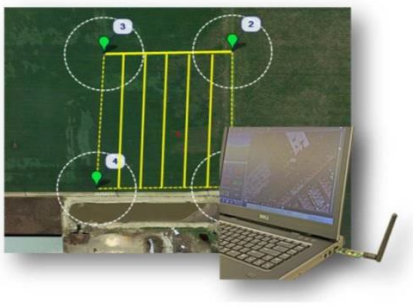
Full wavelength-range hyperspectral imaging at your finger tips

	Specifications[1]
Operation Mode	Push-broom
Spectral Range	475-900 nm
Number of Spectral Bands	Up to 150
Spectral Resolution	Approx. 5 nm FWHM
Spatial Pixels	2000px * scan-length
Lens (Standard)	35 mm (18° FOV) or 16 mm (39° FOV)
Lens Interface	C-mount
Exposure Time	20 µs – 1 s
Wavelength Calibration	Factory calibrated
Frame Rate	Up to 120 frames/sec
Operation	Automatic; frame rate control; delayed start
Data Format	ENVI-BSQ for hyper-cube, BMP band images, ROI spectra, and RAW (pixel data)
Operating Temperature	-20°C to +60°C
Power Consumption	< 4 W (powered by USB 3.0)
Size	Camera with lens: 3 cm x 3 cm x 7.5 cm (1.18 in x 1.18 in. x 2.95 in.)
Weight	Camera and lens: 0.26 lb. (117 g)
Data Transfer Interface	USB 3.0 SuperSpeed
Remote Control	WiFi (when in range)

[1] Specifications subject to change without notice.

[1] Customized UAV platform available.





BaySpec, Inc.
1101 McKay Drive
San Jose, CA 95131
USA

Tel: +1 (408) 512-5928
Fax: +1 (408) 512-5929
Web: www.bayspec.com
Email: sales@bayspec.com