

BaySpec's Handheld **OCI-1000™** Hyperspectral Imager brings for the first time high performance Hyperspectral imaging in a compact form factor weighing less than 1 lbs. (450 g). The Compact **OCI-1000™** Imager acquires visible-near infrared (VNIR) Hyperspectral data (each pixel on image has a full spectrum) with high spectral and spatial resolution with excellent sensitivity.

BaySpec's highly-integrated spectral imager integrates the capability of high-end Hyperspectral imagers on an image sensor, at the level of the chip itself, removing the need for expensive, bulky and complex optics that are used on traditional systems today. The result is a fast Hyperspectral imager weighing less than 1 lbs. that can be installed almost anywhere from UAV drones to conveyor belts in production lines. Eventually, compact Hyperspectral systems could be adapted for much wider use such as in outpatient medical clinics for point of care diagnostics.

KEY FEATURES:

- Self-contained system with push-broom hyperspectral imager and touchscreen computer integrated in a handheld device
- Wide range of objective lenses for wide angle to close-up views
- Suitable for conveyor-belt, fast moving in-line applications
- Weighing less than 1 lbs.



OCI-1000™ Hyperspectral Imager (*front and back*)

* Please contact BaySpec for more information on our *OCI-1000* Starter Kit

Applications:

- Airborne mini UAV
- Agriculture
- Remote sensing
- Optical sorting
- Spectroscopy
- Food safety
- Forensics
- Pharmaceuticals
- Surveillance
- Counterfeit detection
- Tissue diagnostics
- OEM Systems

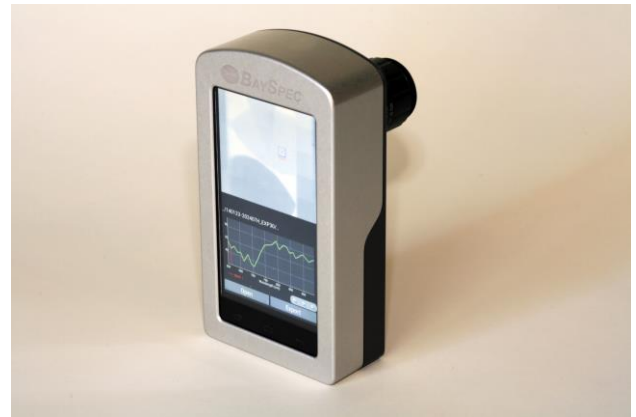
About BaySpec, Inc.

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.

Specifications:

	Specifications
Model	OCI-1000™
OPTICAL	
Spectral Range*	600-1000 nm
Number of Spectral Bands	~100
Spectral Resolution	< 5 nm
Calibration	Factory calibrated
Objective Lens Interface	C-mount
Spatial Pixels	2048 x scan-length
Data Format	RAW (pixel data only) or ENVI-BSQ for hyper-cube file
ENVIRONMENTAL	
Operating Temperature	-20°C to +60°C
COMPUTER	
Embedded PC	Android™ Operating System Home Screen
Memory	64GB RAM
Battery	Rechargeable lithium ion
Power	USB data/charging port
Weight	0.9 lbs. (410 g)**
Size (W x H x L)	3.0 x 5.6 x 1.4 inches ³ (77 x 142 x 36) mm ^{3**}

* Dependent on objective lens used
** Not including objective lens

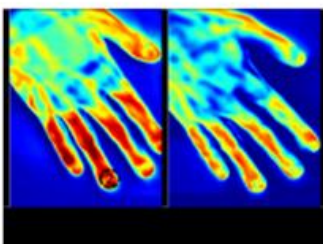


OCI-1000™ Handheld Hyperspectral Imager

Hyperspectral cameras, compared to traditional cameras, divide the light spectrum into many small wavelength bands. Therefore, a Hyperspectral camera captures the spectral fingerprint of an object, a unique spectral signature. This spectral signature gives very detailed information about the material constitution of the imaged object.

Hyperspectral imaging considerably improves the identification and classification of objects and is today recognized as a key enabling technology for next-generation industrial inspection, medical diagnosis and security applications.

Medical



Optical Sorting



Precision Agriculture



Remote Sensing

