Hinalea™

Model 4250
## 400-1000nm VIS-NIR

INTELLIGENT HYPERSPECTRAL IMAGING

Hinalea's 4250 VNIR system represents the next generation of intelligent hyperspectral imagers. Based on front-staring Fabry Perot technology, the 4250 includes hardware and software required to support a broad range of hyperspectral imaging applications. A tunable filter that sequentially selects spectral bands is placed in front of the sensor and generates the hyper-cube by collecting complete images at each spectral band-pass.

The 4250 captures a complete high-spatial-resolution image data-cube across the visible to near infrared spectral range at 4 nm resolution in seconds, but can also be programmed to scan a subset of bands. This subset can be dynamically controlled based on the application and object to be imaged.

Thanks to its design, the Hinalea 4250 offers high spectral and spatial resolution without the image uniformity challenges that line-scanning hyperspectral and patterned filter snapshot multi-spectral imagers present. In addition, Hinalea has developed its hyperspectral technology to be small, lightweight, and affordable for straightforward deployment in a lab setting, in a production environment, or in the field.

Powerful Software
The 4250 VNIR system includes proprietary application software featuring fast and easy hyper-cube capture and intuitive image classification/segmentation as part of a suite of powerful spectral image exploration tools.
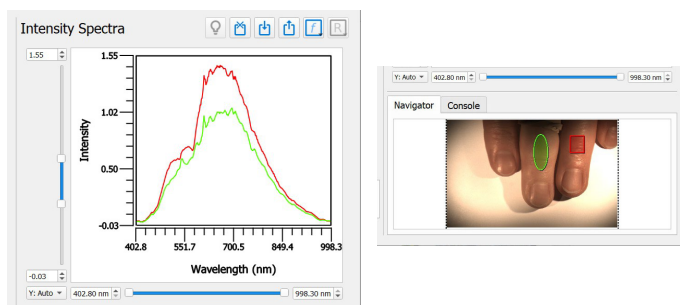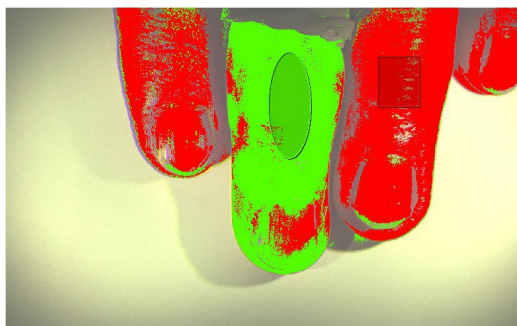
4250 TECHNICAL SPECIFICATIONS

MECHANICAL

Dimensions (LxWxH)	197.7mm (7.78") x 81mm (3.19") x 78mm (3.07"). 15° FOV lens adds 45.5mm (1.79") when focused at infinity (see below) 30° FOV lens adds 130.7mm (5.15") when focused at infinity (see below)
Weight (Mass)	1.25 kg (2.75 lbs.)

ELECTRICAL

Input voltage	110 VAC at 60Hz / 220 VAC at 50Hz
Data interfaces	USB 2.0, 3.0

ENVIRONMENTAL

Operating temperature	15° to 45° C
Humidity	65% non-condensing

SCAN PERFORMANCE

Standard lens	15° Field of View (FOV) — 150 mm to ∞
	30° Field of View (FOV) — 150 mm to ∞
Sensor spatial resolution	2.3 MP *
Spectral range	400-1000 nm
Spectral bands	300 nominal
Spectral resolution	4 nm (FWHM)
Dynamic range	User selectable; 8- or 16-bit
Illumination	Optional

* RGGB sensor; effective monochromatic equivalent 588,544 pixels without de-mosaicing

Contact us!

sales@hinalea.ai

www.hinalea.ai

Hinalea™