HINALEA UV PRO

HYPERSPECTRAL IMAGER
225 - 500 nm



FRONT-STARING, FULL-FRAME IMAGING

No trade-off between spectral and spatial resolution

BAND-SELECTABLE SPECTRAL ACQUISITION – LIVE SPECTRAL IMAGING

Target specific application wavelengths at max speed and live stream classified images

INTEGRATED SOFTWARE PLATFORM AND SDK

Includes powerful tools for intuitive data analysis and integration

Hinalea

INTELLIGENT HYPERSPECTRAL IMAGING

HINALEA UV PRO

SPECIFICATIONS

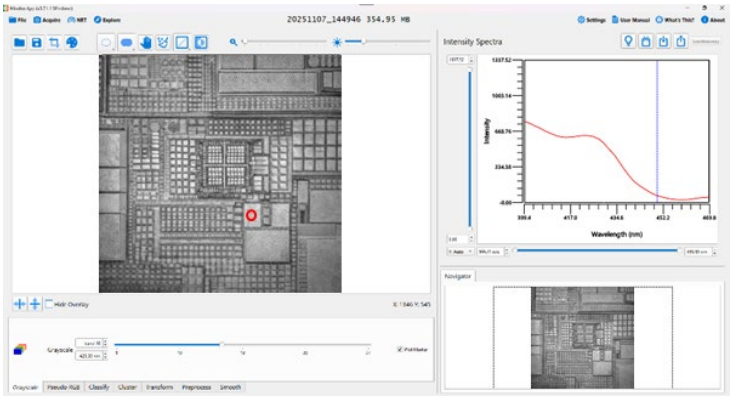
The **HINALEA UV PRO** intelligent imaging system combines high spatial and spectral resolution across the 225–500 nm ultraviolet range. Powered by Hinalea's tunable Fabry-Pérot Interferometer (FPI), the UV PRO captures complete two-dimensional images at each wavelength without mechanical scanning, producing highly uniform, spatially registered hyperspectral data. Band-selectable spectral acquisition enables application-specific wavelengths to be targeted for faster imaging and classification. Designed for laboratory research and industrial inspection, the UV PRO provides access to spectral information and material differences that are difficult to detect using conventional imaging techniques.

SPECTRAL PERFORMANCE

Standard lens	~40 mm FL 16° FOV; optional 32° FOV; Focus from 150 mm to ∞
Sensor spatial resolution	640 x 512 pixel (optional 1280 x 1024)
Spectral range	225 – 500 nm
Spectral bands	100 nominal
Spectral resolution	4 nm FWHM
Dynamic range	8 or 16-bit
Illumination	Optional

SENSOR INFORMATION

Sensor type	sCMOS
Objective mount	SM1



MECHANICAL

Dimensions (L×W×H)	400 mm x 100 mm x 100 mm
Weight (Mass)	8.0 lbs. / 3.6 kg

ELECTRICAL

Input voltage	Controller: 12VDC, 30W Sensor: 12VDC, 38.4W Max
Data interfaces	FPI: USB-C/USB 3.0 Sensor: USB 3.2 Gen 2

ENVIRONMENTAL

Operating temperature	15 °C to 30 °C
Humidity	65%, non-condensing

KEY BENEFITS

- **High-Quality Hyperspectral Data:** Full-frame image acquisition delivers highly uniform, spatially registered hyperspectral data cubes for quantitative analysis.
- **Live Stream Spectral Imaging and Classification** — Selectable wavelengths enable near **real-time** imaging and classification.
- **Compact and Portable:** Lightweight design simplifies laboratory and field deployments.
- **Open Data Workflow:** Export data cubes in standard formats for ENVI, MATLAB, Python, and other platforms.

Subject to change

(formerly Model 4000)