HINALEA VNIR PRO

HYPERSPECTRAL IMAGER
400 – 1000 nm



FRONT-STARING, FULL-FRAME IMAGING

No trade-off between spectral and spatial resolution

LIVE SPECTRAL IMAGING WITH NEAR REAL-TIME ACQUISITION

Dynamic wavelength selection and live stream classified images

INTEGRATED SOFTWARE PLATFORM AND SDK

Includes powerful tools for intuitive data analysis and integration

Hinalea

INTELLIGENT HYPERSPECTRAL IMAGING

HINALEA VNIR PRO

SPECIFICATIONS

The **HINALEA VNIR PRO** can operate across a range of acquisition modes, from full static hyperspectral cube acquisition to live stream operation using selected Fabry-Pérot interferometer gaps. For applications where only a small number of diagnostic bands are required, near real-time operation can materially increase cube throughput while preserving the front-staring, full-frame acquisition advantages of Hinalea's Fabry-Pérot architecture.

SPECTRAL PERFORMANCE

Standard lens	15° and 30° FOV lens 150 mm to ∞
Sensor spatial resolution	1936 × 1216 (2.3 Megapixel)
Spectral range	400–1,000 nm
Spectral bands	301
Spectral resolution	4 nm FWHM
Dynamic range	User selectable 8- or 16-bit
Illumination	Optional

SENSOR INFORMATION

Sensor type	CMOS
Objective mount	M42

MECHANICAL

Dimensions (L×W×H)	197.7 x 81 x 78 mm (not including objective lens)
Weight (Mass)	2.75 lbs /1.25 kg

ELECTRICAL

Input voltage	Sensor: USB3: 5V (4.5W) Controller: 12VDC, 30W (4W)
Data interfaces	USB 2.0

ENVIRONMENTAL

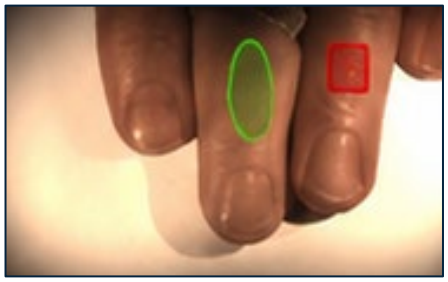
Operating temperature	15 °C – 30 °C
Humidity	65% non-condensing

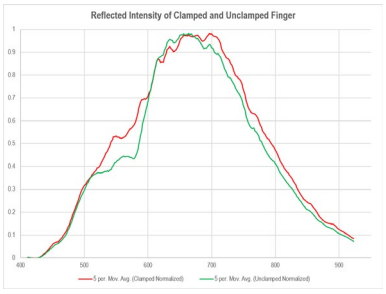
Subject to change

KEY BENEFITS

- **High-Quality Hyperspectral Data:** Full-frame image acquisition delivers highly uniform, spatially registered hyperspectral data cubes for quantitative analysis.
- **Live Stream Capability:** Maintains full-frame front-staring imaging advantages during NRT (Near Real-Time) mode operation.
- **Compact and Portable:** Lightweight design simplifies laboratory and field deployments.
- **Open Data Workflow:** Export hyperspectral data cubes in industry-standard formats for seamless analysis in ENVI, MATLAB, Python, Hinalea software, and other 3rd party platforms.







(formerly Model 4250)