HERA Hyperspectral Camera **VIS-SWIR 400-1700 nm**

HERA IPERSPETTRALE is a compact and rugged hyperspectral camera that enables an innovative approach to spectral imaging.
With its unique and patented technology based on time-domain **Fourier Transform** detection, HERA provides an **exceptional spatial-spectral resolution** and a superior **sensitivity** in low-light illumination conditions.

Experience the unexperienced.

HERA VIS-SWIR natively provides 1.3 Mpixel hyperspectral images over the 400-1700 nm range without any upscale or data merging algorithm, ensuring unmatched data fidelity, accuracy, and quality for your most demanding applications.

Benefits

- **400-1700 nm spectral coverage in a single measurement**
- Ease of use: place it on the tripod, **point it to the sample and measure**
- Portable, plug and play device

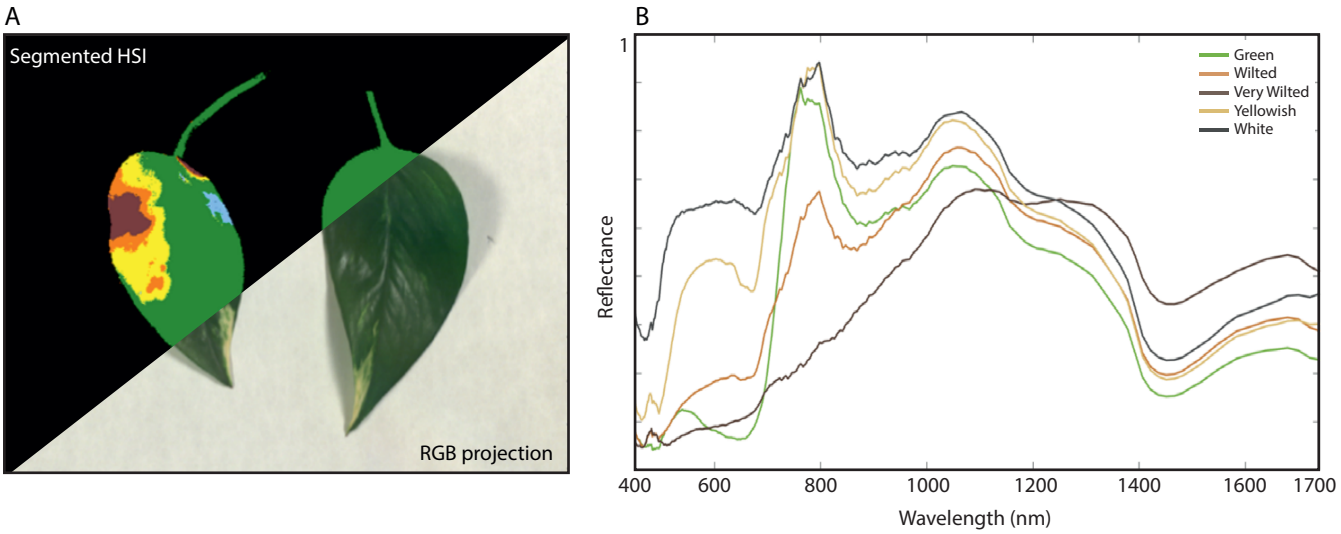
Key Features

- High spatial & spectral resolution
- High sensitivity and throughput
- Compact and lightweight
- Export data in ENVI format
- User friendly software (measurement & data analysis)



Main Applications

- Semiconductors and Material Science
- Life science
- Smart Agriculture and Food quality
- Art Conservation
- Forensics
- Plastics and microplastics



Hyperspectral Image of two leaves.
A: The VIS-SWIR spectral range allows to retrieve the RGB image, as well as further chemical information contained in the SWIR region, enabling an automatic segmentation algorithm.
B: reflectance spectra relative to the colored areas in A.

Technical specifications

Spectral range	400 - 1700 nm
Sensor spatial resolution	1280 × 1024 pixels
User adjustable spectral resolution	<1.5 nm @ 400 nm <20 nm @ 1700 nm
Sensor	Sony IMX990
Number of bits	12 bits
Number of spectral bands	Selectable via Software*
Field of view	8 degrees**
Dimensions	246 × 160 × 107 mm
Weight	3 kg
Recommended System Requirements	32 GB RAM, SSD drive suggested

* HERA is a FT spectroscopy based instrument and the number of extracted spectral bands can be chosen depending on the needs. Preset scan modes providing different spectral resolutions (and numbers of bands) are available in the Acquisition App software.
**The Field of View can be reduced (MACRO imaging) by adding the Macro Lens in front of the camera.

Additional accessories:
SDK, Microscope adapter (C-mount, separately available for VNIR and SWIR ranges), Macro Lens, Illumination System, Laptop, Spectralon, Tripod.

HERA VIS-SWIR is a Dual-Use Product (Annex I of the EU Regulation 2021/821 and subsequent amendments, control code 6A003.b.4.a)