HERA Hyperspectral Camera eSWIR 1200-2200 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.

Key Features

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

Applications

- Remote Sensing
- Material Sorting
- Biology
- Agriculture and food quality
- Pharmaceuticals
- Art Conservation
- Forensics

Customer Benefits

- Ease of use: place it on the tripod, point it to the sample and measure
- The high throughput ensures high-quality data even at the lowest light dose
- Portable, plug and play device



Example of hyperspectral imaging for remote sensing. The image shows the result of a classification algorithm, which distinguishes the sky (light blue), the buildings (orange), the tree (and their reflections in the windows of the building, in green) and the solar panels (in yellow).





This remote landscape hyperspectral image has been obtained by acquiring three separate hyperspectral images with HERA eSWIR, which have been stitched together during data analysis.

Technical specifications

Spectral range	1200 - 2200 nm
Sensor spatial resolution	636 × 508 pixels
User adjustable spectral resolution	<10 nm @ 1200 nm <30 nm @ 2200 nm
Sensor	InGaAs with TEC
Number of bits	14 bits
Number of spectral bands	Selectable via Software*
Field of view	11 degrees**
Working distance	1 m - ∞
Dimensions	240 × 170 × 140 mm
Weight	4.5 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 extended (up to 18 degrees) or reduced (MACRO imaging) by adding optional lenses in front of the camera.

Additional accessories:
SDK, FOV extender lens (FOV2), Macro Lens, Illumination System, Laptop, Spectralon, Tripod.

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