

HERA Hyperspectral Camera VIS-NIR 400-1000 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 and lightweight
- Export data in ENVI format
- User friendly software (measurement & data analysis)

Applications

- Fluorescence imaging
- Sorting of materials
- Biology and Microbiology
- Agriculture and food quality
- Microscopy
- 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



Exploit built-in statistical algorithms in the Analysis App to automatically segment the image, or export the hyperspectral image in standard formats for a further processing.









Hyperspectral Image of a ColorChecker reference sample. (1) RGB reconstruction from the hyperspectral image, and (2) reflectance spectra relative to the selected areas in (1).

Technical specifications

Spectral range	400 - 1000 nm
Sensor spatial resolution	1280 x 1024 pixels
User adjustable spectral resolution	<1.5 nm @ 400 nm <10 nm @ 1000 nm
Sensor	CMOS
Number of bits	12 bits
Software interface	Labview based interface
Number of spectral bands	∞*
Field of view	8 degrees**
Working distance	1 m - ∞
Dimensions	205 x 150 x 83.5 mm
Weight	2 kg
Minimum Computer Requirements	32 GB RAM, SSD drive suggested

* HERA is a FT spectroscopy based instrument and the number of spectral bands is software selectable

** The Field of View can be extended (up to 16 degrees) or reduced (MACRO imaging) by adding a optional lenses in front of the camera

Customization: HERA can be coupled to commercial microscopes using an optomechanical adapter