# HERA Hyperspectral Camera SWIR 900-1700 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.

## Key Features

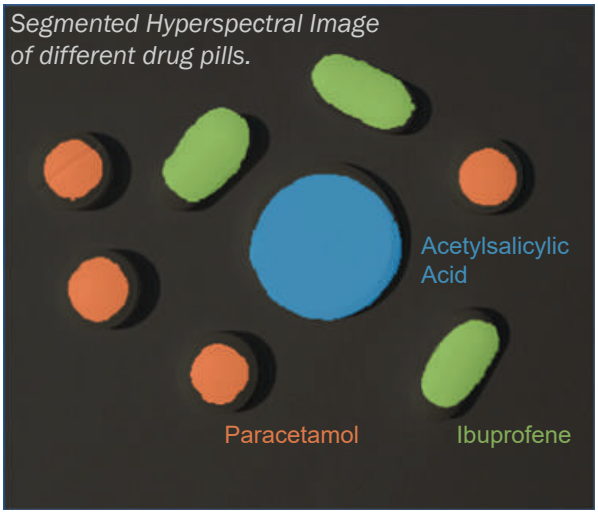
- High spatial & spectral resolution
- High sensitivity and throughput
- Compact and lightweight
- Export data in ENVI format
- User friendly software (measurement & data analysis)

## Applications

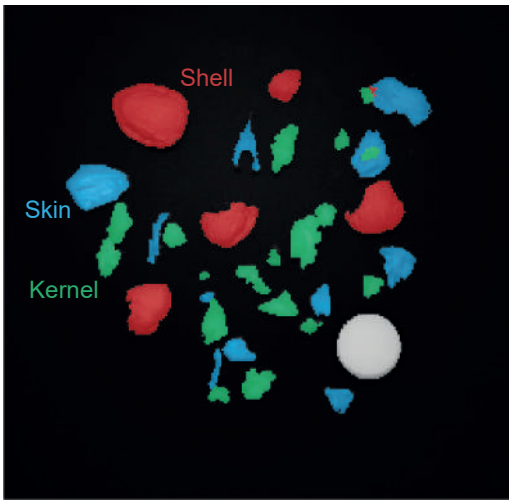
- Fluorescence imaging
- Plastic Sorting
- Biology and Microbiology
- Agriculture and food quality
- Pharmaceuticals
- Art Conservation
- Forensics

## Customer Benefits

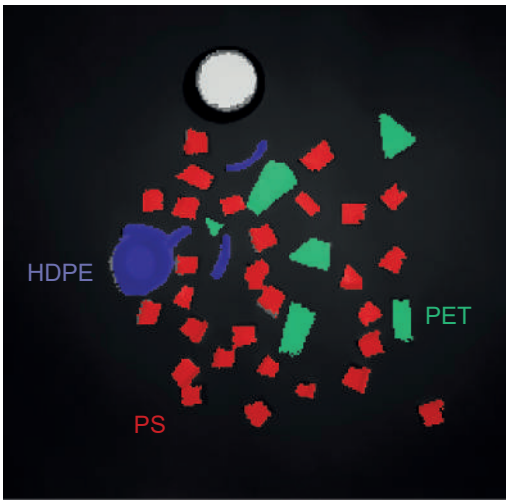
- Ease of use: place it on the tripod, **point it to the sample and measure**
- The high throughput ensures high-quality data even at the lowest light dose
- Portable, plug and play device




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.




Classified image of walnuts:
the shell (in red), the internal skin (in blue) and the kernel (green). The white circle is a Spectralon reference.




Classified image of plastic parts:
HDPE (purple), PET (green) and PS (red).
The white circle is a Spectralon reference.

## Technical specifications

| | |
|---|---|
| Spectral range | 900 - 1700 nm |
| Sensor spatial resolution | 640 x 512 pixels |
| User adjustable spectral resolution | <5 nm @ 900 nm<br><20 nm @ 1700 nm |
| Sensor | cooled InGaAs (ΔT = 30°) |
| Number of bits | 14 bits |
| Software interface | Labview based interface |
| Number of spectral bands | ∞* |
| Field of view | 11 degrees** |
| Working distance | 1.5 m - ∞ |
| Dimensions | 220 x 160 x 105 mm |
| Weight | 2.85 kg |
| Minimum Computer Requirements | 16 GB RAM, SSD drive suggested |

* HERA is FT spectroscopy based instrument and number of spectral bands is software selectable and independent from measurement time
**The Field of View can be extended (up to 18 degrees) by adding an optional lens in front of the camera