

RESONON

HYPERSPECTRAL IMAGING SYSTEMS

Complete systems for laboratory and outdoor applications.



Resonon's hyperspectral imaging systems are fully-integrated, plug-and-play solutions, with all hardware and software necessary to acquire and analyze hyperspectral data.

BENCHTOP SYSTEM

For laboratory use

System components:

- ◆ Hyperspectral Imaging Camera
- ◆ Data Acquisition Computer & Software
- ◆ Linear Translation Stage
- ◆ Mounting Tower & Baseplate
- ◆ High-Intensity Illumination
- ◆ Calibration Target

OUTDOOR FIELD SYSTEM

Tripod-mounted scanning system

System components:

- ◆ Hyperspectral Imaging Camera
- ◆ Rotational Scanning Stage & Tripod
- ◆ Ruggedized Laptop & Data Acquisition Software
- ◆ Radiometric Calibration
- ◆ Calibration Target
- ◆ Power Supply
- ◆ Protective Travel Case

Multiple options are available for each configuration. Please contact us to discuss your requirements.

HYPERSPPECTRAL CAMERA OPTIONS

| | Pika L | Pika XC2 | Pika IR | Pika IR+ | Pika UV |
|---------------------------------|------------|------------|------------|----------|-----------|
| Spectral Range (nm) | 400 – 1000 | 400 – 1000 | 900 – 1700 | 900-1700 | 330 – 800 |
| Spectral Channels | 281 | 447 | 164 | 328 | 255 |
| Dispersion per Pixel (nm) | 1.07 | 0.67 | 4.88 | 2.44 | 0.46 |
| Spectral Resolution – FWHM (nm) | 3.3 | 1.9 | 8.8 | 5.6 | 2.8 |
| Spatial Pixels | 900 | 1600 | 320 | 640 | 1500 |
| Maximum Frame Rate (fps) | 249 | 165 | 521 | 250 | 142 |

STAGE AND LIGHTING CONFIGURATIONS

REFLECTANCE SYSTEM



The linear stage holds the sample and translates across the field of view. Used for small samples that are easy to move.

REFLECTANCE-TRANSMISSION SYSTEM

REFLECTANCE CONFIGURATION



TRANSMISSION CONFIGURATION



This system allows for illumination from above (Reflectance) or from below (Transmission). A clear sample plate is mounted to the linear stage, which is mounted on the column. The line light is easily transferred between the Reflectance and Transmission configurations.

REFLECTANCE OF LARGE SAMPLES

The imager and lighting assembly are mounted directly to a long translation stage which can be mounted horizontally or vertically. Used to scan larger objects.



Custom configurations available, contact us for details.

Sample data and hyperspectral analysis software are available for free download at www.downloads.resonon.com.