

Hyperspectral Imaging Systems



Affordable turnkey hyperspectral imaging systems for laboratory and outdoor applications.

Resonon's hyperspectral imaging systems are fully integrated plug-and-play solutions, complete with hyperspectral imager, scanning stage, lighting, and data acquisition and analysis tools.

Benchtop System

For laboratory use.

System components:

Hyperspectral imaging camera
Linear translation stage
Mounting tower
Stabilized lighting assembly
Data acquisition computer with software

Positions of imager and lighting assembly are adjustable along the length of the tower.

Outdoor Field System

Tripod mounted scanning system.

System components:

Hyperspectral imaging camera
Rotational scanning stage
Tripod with tray for laptop computer
Power supply
Data acquisition computer with software

SpectrononPro is Resonon's user-friendly data acquisition and analysis software. **SpectrononPro** controls the hyperspectral imaging system, contains useful tools for hyperspectral data analysis, supports user-written plugins, and provides numerous output options. A free version of **SpectrononPro** and sample datacubes are available for download at **www.downloads.resonon.com**.

Resonon also provides a **C++ API** for customers wishing to integrate our hyperspectral imaging cameras into their own system. This **API** is available free to customers upon request.

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

Visit www.resonon.com for complete product specifications.



Hyperspectral Camera Options

Resonon's hyperspectral imaging systems can be fitted with any of Resonon's hyperspectral imaging cameras, covering the 350 – 1700 nm spectral range.

	Pika NUV	Pika II	Pika XC	Pika NIR
Spectral Range (nm)	350 – 800	400 – 900	400 – 1000	900 – 1700
Spectral Resolution (nm) *	2.5	2.1	2.5	5.5
Spectral Channels	184	240	240	145
Spatial Channels	1600	640	1600	320
Max Frame Rate (fps)	67	145	242	100
Bit Depth	12	12	14	14

^{*} The number of spectral channels equals the spectral range divided by the spectral resolution, and depends on the RMS spot size.

The number of independent spectral channels is NOT the same as the number of sensor pixels in the spectral direction.

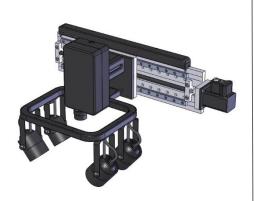
Benchtop System Stage Options

Standard Linear Stage



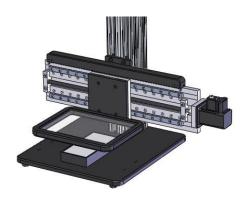
The linear stage holds the sample and translates across the field of view. Used for small samples that are easy to move.

Lighting & Imager Stage



The imager and lighting assembly are mounted to the standard translation stage.
Used to scan stationary objects.

Backlight Stage



Backlighting with a clear stage platform. Often used to scan biological samples.

About Resonon

Founded in 2002, Resonon is located in Bozeman, Montana in the heart of the Rocky Mountains. We provide the industry's most affordable turnkey hyperspectral imaging systems, as well as custom solutions for complex hyperspectral and optical applications. Our hyperspectral imaging cameras are lightweight, easy to use, have low stray light, low distortions, high SNR, and excellent image quality.

Resonon is partnered with distributors around the world. Contact us to discuss your technical requirements.

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