

UV HYPERSPECTRAL IMAGING SYSTEM

(220 – 380 nm)



analytik

The UV Hyperspectral Imaging System is a ready-to-use solution for capturing and analyzing UV hyperspectral images.

The plug-and-play inno-spec UV Hyperspectral Imaging System contains:

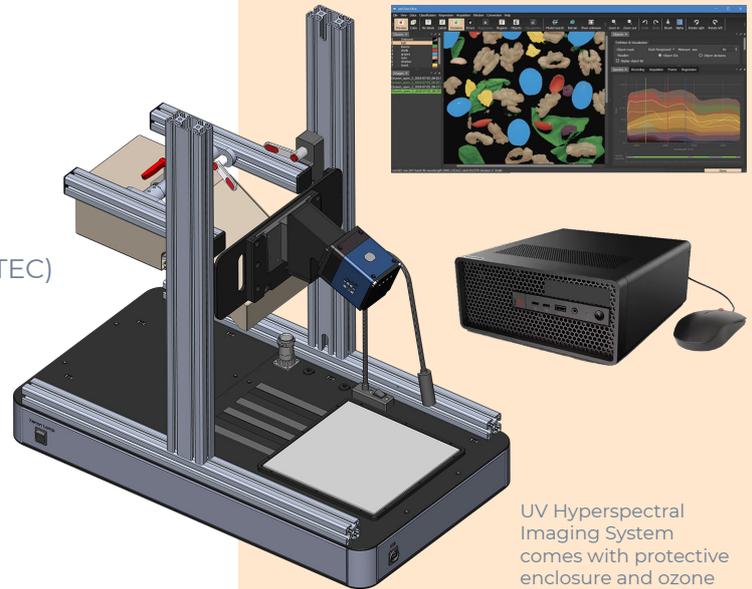
- UV hyperspectral camera (inno-spec BlueEye TEC)
- UV scanning stage (Speccer)
- UV lamp
- Enclosure for UV safety
- Ozone mitigation system*
- Compact desktop computer
- perClass Mira® data acquisition and analysis software

Thoughtful design addresses the practical challenges of using UV illumination for hyperspectral imaging. The perClass Mira software integrates acquisition and analysis in one interface, allowing for rapid and real-time analysis and a smooth transition from development to deployment.

APPLICATION AREAS:

- Biomedical research and commercial biotechnology
- Pharmaceutical tablet characterization
- Forensics and cultural heritage
- Adhesive and film analysis
- Quality control
- Contamination detection
- Chemical analysis

*Ventilation to unenclosed space during operation required.



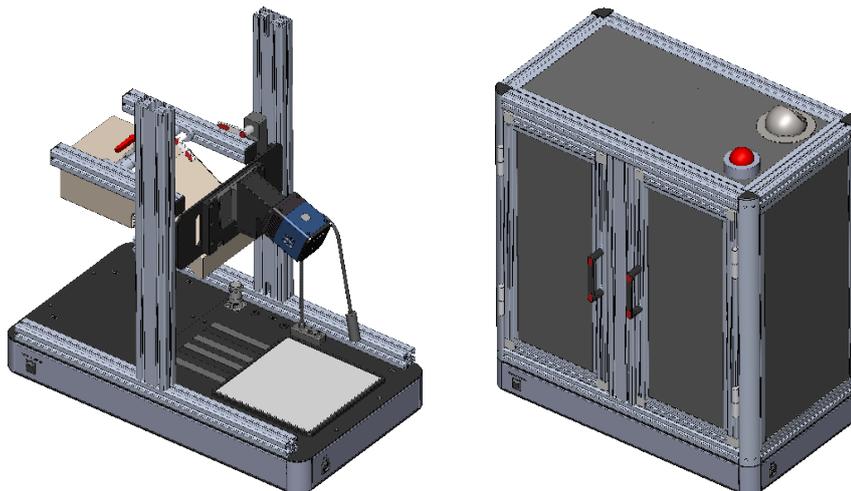
UV Hyperspectral Imaging System comes with protective enclosure and ozone mitigation system, not shown here for clarity.

UV HYPERSPECTRAL IMAGING SYSTEM FEATURES:

- HSI sensor covering UVA, UVB, and UVC
- Adjustable sensor and illumination height
- CE/RoHS certified
- Robust design

TECHNICAL SPECIFICATIONS		
Wavelength Range	220 - 380 nm	
Pixels ¹ (spatial x spectral)	2048 x 1750	
Spectral Resolution (FWHM)	< 2 nm (with 80 µm slit)	
Sensor	CMOS, Back-Illuminated	
Pixel Pitch	6.5 µm x 6.5 µm	
Numerical Aperture	f/2.4	
Maximum Frame Rate	40 fps (Full-Frame)	
ADC Bit-Depth	16-bit (2 x 12-bit ADC at Low- and High-gain)	
Digital Interface	USB 3.1 Type C (Sensor); USB 2.0 (Stage)	
Sample Scan Speed	1 – 80000 µm/s	
Illumination	Broadband Xenon Arc Lamp	
Safety Equipment	Interlocked Enclosure and Ozone Scrubber	
BlueEye TEC Weight (without lens)	1.9 kg	
Cooling Technology	TEC + Forced Air	
BlueEye TEC Dimensions (without lens)	138 mm x 87 mm x 204 mm	
System Weights (excluding cables and hoses)	Stage + Enclosure	64 kg
	Lamp	3.7 kg
	Lamp Power Supply	5 kg
	Ozone Scrubber	27 kg
Enclosure Dimensions	853 mm x 492 mm x 960 mm	
Input Voltage	88 – 267 VAC (47 – 63 Hz)	
Maximum Power	30 W (Camera) + 250 W (Stage) + 300 W (Lamp)	
Operational Temp Range, Humidity	+10 °C to +40 °C, 10 – 80% Non-Condensing	

¹ The 105 mm focal length lens enables the use of all 2048 spatial pixels and provides color correction for a 250 - 650 nm spectral range. The 25, 35, 50, and 75 mm lenses reduce the useable spatial pixels to ~1750 and provide color-correction across the full spectral range.



Rendering of the UV Hyperspectral Imaging System with and without UV safety enclosure

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BlueEye TEC UV hyperspectral camera

BLUEEYE SENSOR FEATURES AND ACCESSORIES:

1750 spectral pixels

<2 nm spectral resolution

Adjustable spatial and spectral ROI

USB 3.1 Type-C interface

Lens focal length options:
25 mm, 35 mm, 50 mm,
75 mm, 105 mm

As a well-established manufacturer of spectroscopic measurement equipment, **INNO-SPEC** provides optimized solutions for your individual applications; for example, customized OEM cameras for machine builders and system suppliers.

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Manufactured by INNO-SPEC distributed in the UK and Ireland by **analytik**.