

# BLUEEYE

## UV Hyperspectral Imaging Camera (220 – 380 nm)

Introducing the **BlueEye**, our *'true-UV'* pushbroom hyperspectral camera that captures detailed information about the chemical composition and physical properties of the objects being imaged. Its advanced imaging technology is helping researchers and practitioners gain new insights into the world around us.

Combining state-of-the-art reflection grating technology with superior optical design, a sensitive CMOS detector and high-end electronics, the **BlueEye** enables performance for a new level of hyperspectral measurements in the UV wavelength range for well known demands but especially for totally new applications.

### Application areas:

- **Research:**  
Chemistry, Life Sciences, Material Science,...
- **Medical:**  
Surgery, Pathology, Non-invasive Examinations,...
- **Industry:**  
Food, Cosmetics, Pharmaceuticals, Technical,...

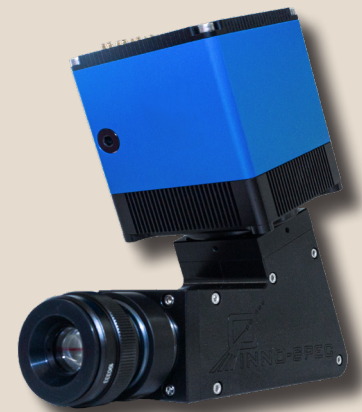
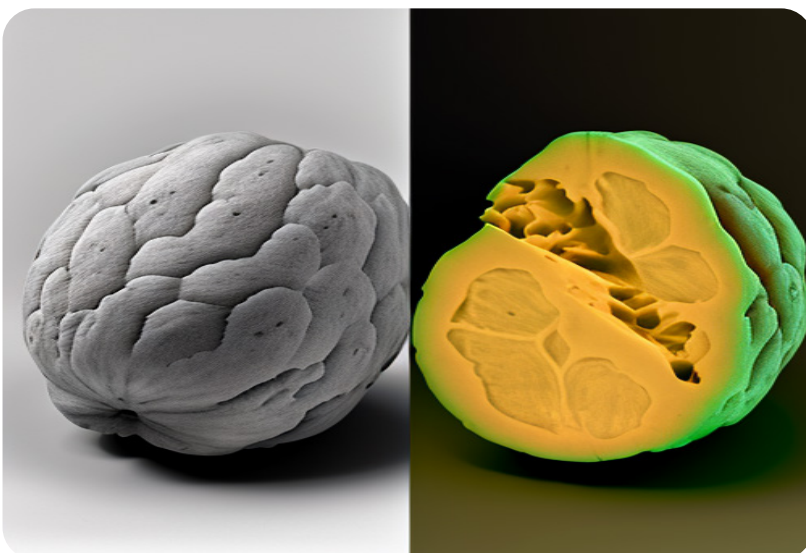


Figure: BlueEye TEC

### Features:

- 1500 spectral pixels
- Selectable ROI (region of interest)
- Robust design
- USB standard interface
- Compact and lightweight design



Website

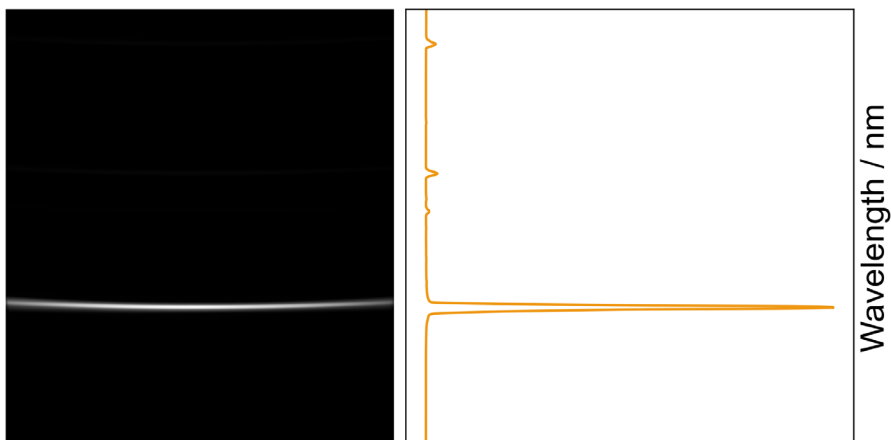


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## Technical Specifications:

	BlueEye PC	BlueEye TEC
<b>Spectrograph</b>		
Spectral range	typ. 220 to 380 nm	
Dispersion	~0.1 nm / px	
Spectral resolution	< 2 nm (with 80 µm slit)	
FOV (Field of View)	adaptable	
Smile	< 160 µm	
Keystone	< 20 µm	
F/#	2.4	
Standard slit width	80 µm (30, 50 and 100 µm available)	
<b>Electronics</b>		
Sensor	back-illuminated CMOS	
Sensor pixels	2048 x 2048	
Active area	typ. 1845 x 1500 (spatial x spectral) pixels	
Pixel size	6.5 µm x 6.5 µm	
Shutter type	rolling, global reset	
Bit depth	16 bit (2 x 12 bit ADC @ low & high gain)	
Frame rate	~ 40 fps (full frame)	
Data interface	USB 3.1	
Power supply	USB 3.1 type C	USB 3.1 type C + 24 V DC (external)
Power consumption	< 6.0 W	< 4.5 W + < 22 W
Sensor cooling	passive	TEC + forced air; sensor temp.: -25 °C to +20 °C
<b>Operating Conditions</b>		
Temperature (operating)	+10 °C to +40 °C	+10 °C to +40 °C
Temperature (storage)	-10 °C to +60 °C	-10 °C to +60 °C
<b>Mechanics</b>		
Dimensions l x w x h	138 x 65 x 162 mm <sup>3</sup>	138 x 87 x 204 mm <sup>3</sup>
Weight	1.4 kg	1.9 kg
Lens mount	standard C-mount	standard C-mount



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

Please note that any specs on the data sheet are subject to change without prior notice.

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Figure: BlueEye PC

## Accessories:

- Different objective lenses
- Conveyor belt, stepper table or tripod with a rotary stage as bundle solutions
- Software packages for customized applications
- Liquid cooling unit (BlueEye TEC only)