

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,...

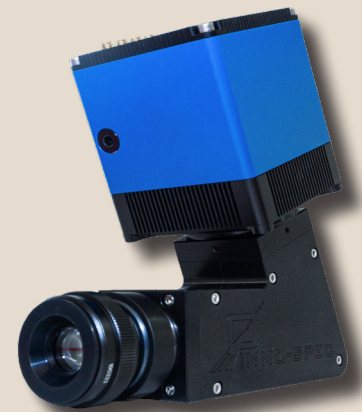
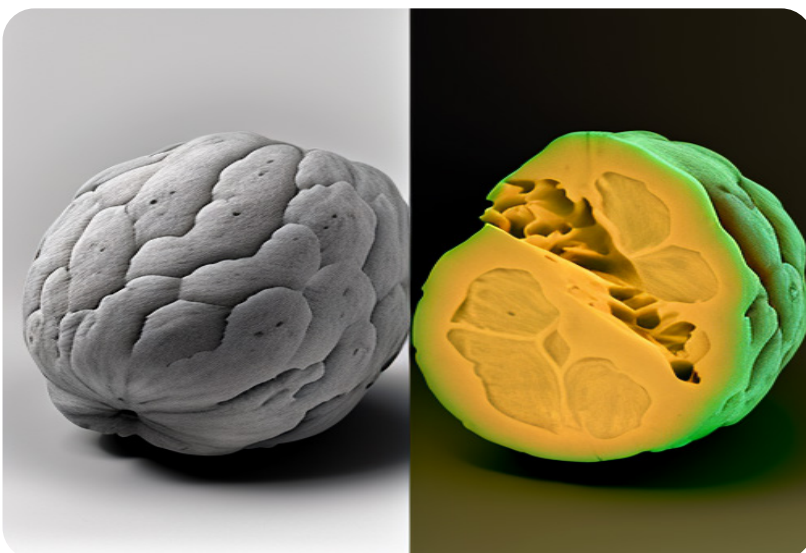


Figure: BlueEye TEC

Features:

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



Website

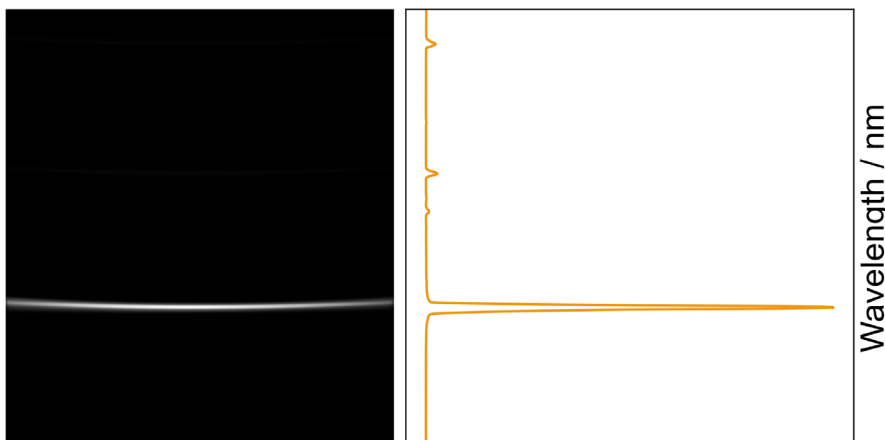


LinkedIn



Technical Specifications:

| | BlueEye PC | BlueEye TEC |
|-----------------------------|--|---|
| Spectrograph | | |
| 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) | |
| Electronics | | |
| 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 | |
| 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 | forced air, liquid (optional); sensor temp.: -25 °C to + 20 °C |
| Operating Conditions | | |
| Temperature (operating) | +10 °C to +40 °C | +10 °C to +40 °C |
| Temperature (storage) | -10 °C to +60 °C | -10 °C to +60 °C |
| Mechanics | | |
| Dimensions l x w x h | 138 x 65 x 162 mm ³ | 138 x 87 x 204 mm ³ |
| 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)