

# ORANGE EYE SCAN

## VNIR Hyperspectral Imaging Camera (500 – 950 nm)

The **OrangeEye Scan** is a powerful, compact visible and near-infrared (VNIR) hyperspectral imaging camera that allows the acquisition of spectral data with extremely high spatial resolution. The camera is based on the linescan (pushbroom) imaging technology, but additionally has an internal scanning unit, that allows to acquire hyperspectral images of stationary objects without moving the camera itself. Furthermore, the camera features an integrated broadband LED-lighting for object illumination.

Combining superior optical design with advanced holographic transmission grating technology, sensitive CMOS detector and high-end electronics, the **OrangeEye Scan** camera brings an outstanding performance making it an ideal tool even for the most demanding applications.

A variety of dedicated accessories for the **OrangeEye Scan** ensures seamless integration into any individual application scenario. Depending on the measured object dimensions, various camera lenses (fore optics) can be chosen for optimal image quality. Additional external tungsten halogen or LED lighting provide bright and homogeneous object illumination.

Different mounting possibilities, e.g., on a desk mount arm or via c-mount adapter directly to microscopes ensure easy setup and optimal sample presentation. Dedicated software packages from SDK to fast data collection and evaluation are available for various user requirements.



### Features:

- Pushbroom imaging camera with internal scanning unit
- Integrated LED illumination
- Transmission grating configuration for superior sensitivity
- High spatial and spectral resolution
- Excellent imaging performance

## Technical Specifications:

### OrangeEye Scan

#### Spectrograph

Spectral range	typ. 500 nm - 950 nm
Dispersion	93 nm / mm
Spectral resolution	7.5 nm
Spatial resolution	960 Pixel
Smile	10 nm
Keystone	5 nm
F-number	3
Slit width	80 µm (others on request)

#### Electronics

Sensor	CMOS
Pixels in full frame	1280 x 960
Pixel size	3.75 x 3.75 µm
Bit depth	10 bit
Data interface /	
Camera control	USB
Power consumption	15 W
Power supply	5 V

#### Operating Conditions

Temperature (operating)	0 - 30 °C
Temperature (storage)	-10 - 45 °C

#### Mechanics

Dimensions l x w x h	260 x 166 x 150 mm
Weight	ca. 2.7 kg
Lens mount	Standard C-mount

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

Optionally, the **OrangeEye Scan** is available without internal scanning unit as conventional pushbroom imaging camera.

As a well-established manufacturer of spectroscopic measurement equipment, **inno-spec** provides optimized solutions for any individual applications: from customized OEM components for system suppliers up to fully integrated turnkey solutions for the end-customers.

## Accessories:

- **Different fore optics:**  
8 mm, 12,5 mm, 16 mm,  
25 mm, 35 mm, 50 mm
- **Various mounting accessories:** desk mount  
arm, microscope  
c-mount adapter, etc.
- **Additional modular tungsten halogen or LED lighting**
- **Multiple software packages**

