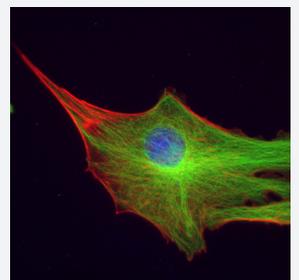
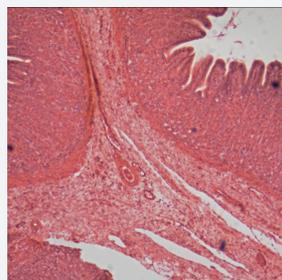




# INVENIO EIV MICROSCOPE CAMERAS

- ▶ High resolution
- ▶ IR sensitive
- ▶ Ultra-sensitive
- ▶ High-speed live video
- ▶ High-quality Sony sensor

Preliminary



# Invenio EIV Cameras

Capture the intricate details of your microscopic specimens with our new Microscope Camera series, the Invenio EIV.

This brand-new camera series makes advanced imaging technology available for organizations with limited budgets, without compromising quality and performance, fast support, and environmental responsibility.

Equipped with an 8-megapixel or a 20-megapixel Sony CMOS sensor, this camera series delivers exceptional image quality and clarity, superb color fidelity, fast framerates, high sensitivity, and low noise. Such specs were previously only found in very expensive cameras with exotic image sensors. Its fast frame rate ensures smooth video capture of dynamic processes. With a broad spectral range, it excels at capturing all kinds of specimens across the light spectrum, including NIR and NUV.

The camera seamlessly integrates with your microscope setup with its standard c-mount mounting and USB 3.0 interface.

The included software provides advanced imaging features, frequently updated free of charge from the DeltaPix homepage.



## High-quality, cost-effective and flexible

The new Invenio EIV microscope camera series has C-mount interface making it easily and cost-efficiently fit on most standard microscopes.



## User-friendly Camera

Plug and play – the USB 3.0 interface provides high speed and ease of installation on any computer. This new camera series has a trigger input option.

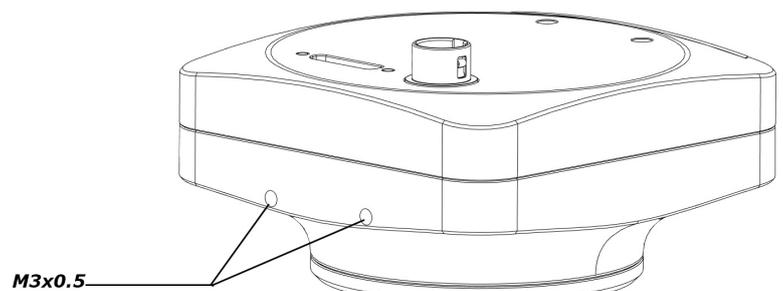
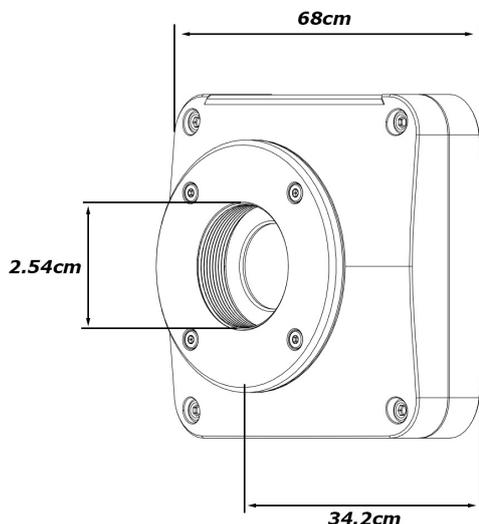
## Applications



The Invenio EIV camera series come in 2 different resolutions and sensor sizes making this series versatile and suitable for many applications.

**Typical applications:** ✓ Material science ✓ Metrology ✓ Dark Field ✓ Bright Field ✓ Fluorescence ✓ Cytology ✓ Biology

## Camera Dimensions



# Invenio EIV Cameras

## Ultra-high sensitive sensors

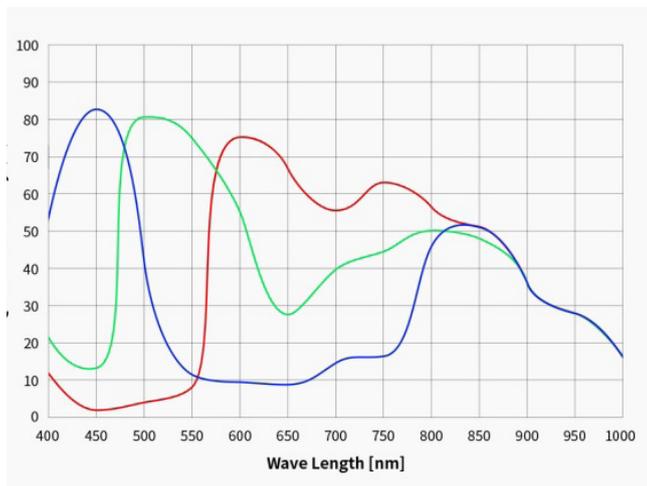
The Invenio EIV Microscope cameras are built with Sony's newest sensor, type STARVIS/STARVIS 2. STARVIS technology is characterized by ultra-high sensitivity, pushing the boundary of imaging technology. With sensitivity superior to that of the standard CMOS sensor, it enables object shape and color recognition even for low-light applications and obtains the required information with accuracy, contributing to greater image quality.

## Discover details beyond the human eye

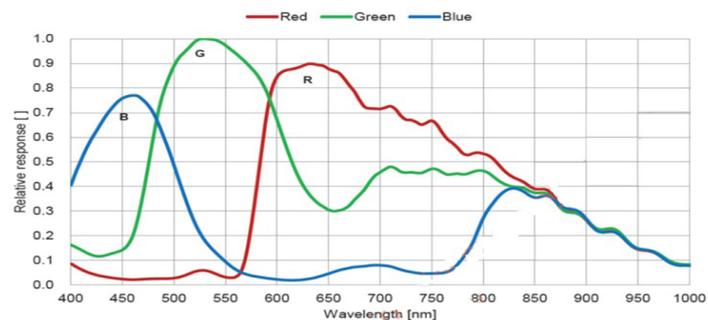
A very wide spectral range sets the Invenio 8EIV microscope camera apart. Boasting an extensive capability of up to a wavelength of 1000nm, these cameras enable imaging in both visible and near infrared spectra. Discover the hidden details and delve into a whole new realm of scientific exploration.

## Spectral Sensitivity

Invenio 8EIV color



Invenio 20ExIV color



## Large field of view

The Invenio 20ExIV microscope camera is the premium model in this series. It is based on a large Sony sensor that provides 20 megapixels of resolution and a global shutter making this camera ideal for any advanced microscopy applications. The Invenio 20ExIV is available in color and monochrome.

## DeltaPix InSight Software

All Invenio EIV cameras include DeltaPix InSight Basic software which is a powerful platform for camera control, precise measurements, and analyses. DeltaPix InSight allows expansion with a multitude of optional modules, for a wide range of advanced applications with an easy-to-use user interface. Available functions in the optional modules are for example extended focus, HDR for wide dynamic images, 3D measurements/ 3D topography, Roughness measurement, stitching, Object Counting, and much more.

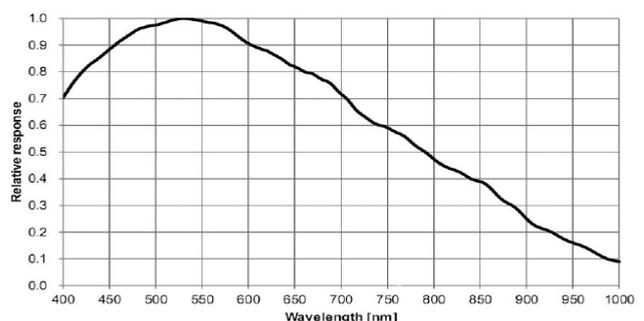
### Technical Highlight Invenio 20ExIV:

- 1.1" Sony sensor
- 20 Megapixels
- Up to 17 FPS in full resolution
- Global shutter
- Ultra-light sensitive
- External trigger line for precise timing of image acquisition.

### Technical Highlight Invenio 20EIV:

- 1/1.8" Sony sensor
- 8.3 Megapixels
- Up to 45 FPS in full resolution
- Spectral Sensitivity up to 1000nm
- External trigger line for precise timing of image acquisition.

Invenio 20ExIV Monochrome



## Invenio EIV cameras

# Features

	Invenio 8EIV	Invenio 20ExIV	Invenio 20EMxIV
Live preview resolution	3840 x 2160 @45FPS 1920 x 1080 @70FPS	4496 x 4496 @17FPS 2240 x 2240@63FPS 1120 x 1120@63FPS	4496 x 4496 @17.5FPS 2240 x 2240@64.4FPS 1120 x 1120@64.4FPS
Still image resolution	8.3 Mpixels (3840 x 2160) 2 Mpixels(1920 x 1080)	20Mpixels (4496x4496) 5Mpixels (2240x2240) 1.25Mpixels(1120x1120)	20Mpixels (4496x4496) 5Mpixels (2240x2240) 1.25Mpixels(1120x1120)
Sensor size	1/1.8" Sony Exmor 7.68mm x 4.32mm	1.1" Sony sensor 12.3mm x 12.3mm	1.1" Sony sensor 12.3mm x 12.3mm
Pixel size	2 μm x 2 μm	2.74μm x 2.74μm	2.74μm x 2.74μm
Exposure time	50μs-10 Seconds		
Gain	1-50		
Sensitivity	810mv with 1/30s	1580mv with 1/30s	2600mv with 1/30s
Shutter	Electronic rolling shutter	Global shutter	
Peak QE	86% @ 520nm	86% @ 520nm	86% @ 520nm
SNR	42dB	42dB	42dB
Dark current	0.15mV	0.15mV	0.15mV
Dynamic range	70dB	75dB	75dB
Data format	8 bit RGB / 12bit RGB		8 bit / 12 bit Monochrome
Lens Mount	C		
White balance	Automatic, manual or spot white balance		
Data interface	USB 3.0 and One optical isolated trigger input		
Software	DeltaPix InSight Basic included		
Data format and compression	24-bit uncompressed Tiff, 24bit JPEG compressed and 24-bit loss-less compressed JPEG2000		
Minimum PC requirements	Intel I5 (quad core) CPU 8 GB RAM 15 GB free hard disk space USB 3.0 port Windows 10 and 11 DeltaPix InSight works with Windows 64Bits A high-resolution monitor		
Power	USB ~ 4W		
Dimensions	68x68x32.4mm		
Weight			