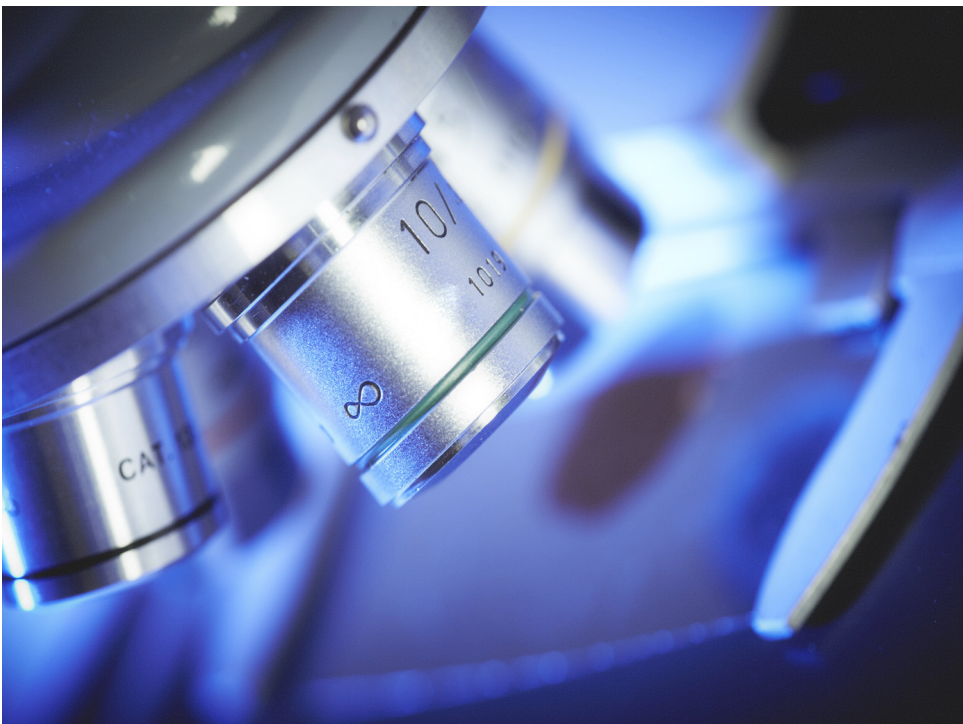




## ***Invenio - Microscope Cameras***



### **DeltaPix Microscope cameras**

Every microscopy application has some specific requirements to the system and the camera. This is why DeltaPix strives to meet the increasingly high expectations by providing cost effective and high quality cameras for every application. Digital microscope cameras are becoming an essential and indispensable tool for image capturing, processing and/or analysis, as well as documentation and archiving. Digital microscope cameras from DeltaPix provide the highest image quality in real-time, exceptional color reproduction and fidelity, and a high dynamic range. DeltaPix offers a wide range of cameras with different sensor types and interface.



## **Why DeltaPix Invenio?**

DeltaPix has since 2003 developed software, manufactured and marketed microscope cameras to customers in many different countries. Microscope cameras from DeltaPix are particularly remarkable for their fast video streaming, low noise and high resolution.

All DeltaPix Microscope cameras are built in Denmark by DeltaPix in a dust free clean chamber to achieve the best quality camera and image.



## **Quality made in Denmark by DeltaPix**

### **Low Noise**

Even though DeltaPix cameras are built with the same sensors as many other cameras on the market, huge performance differences can easily be found. One of the differences is noise.

Noise comes from the sensor itself, but also from the surrounding electronic circuits and the wires.

By choosing components, wiring, grounding and shielding intelligently, noise levels can be decreased significantly.

### **Reliable**

DeltaPix Microscope cameras are carefully ESD protected, and tested thoroughly before it passes the quality control, in order to offer a market leading reliability. This is the reason why DeltaPix camera's fail rate is as low as it is.

### **User-friendly Camera**

Plug and play – the USB 2.0/3.0 interface for ease of installation on any computer. No need for external power supply, because DeltaPix Microscope cameras use the included USB cable for power, control and to transmit data.

All DeltaPix cameras are built with C-mount which makes the camera compatible with most microscopes and objectives on the market.

### **Support and Service.**

DeltaPix cameras are supported by an experienced team of experts with more than 25 years of experience in the field of camera and imaging. Our goal is to provide our customers with the best service and guide them to choose the right camera for their application. Normally support requests are answered within a few hours, and if needed, DeltaPix can do remote on line support and setup.



## DeltaPix Invenio EIII Series

The Invenio EIII Series is designed to excel in image quality, sensitivity, colour fidelity and speed.

The Invenio EIII cameras are available in 2.3 Megapixel and 6.3 MegaPixel. The Invenio EIII cameras are ideal for various applications in life- and material science dark field, bright field Biology and much more.



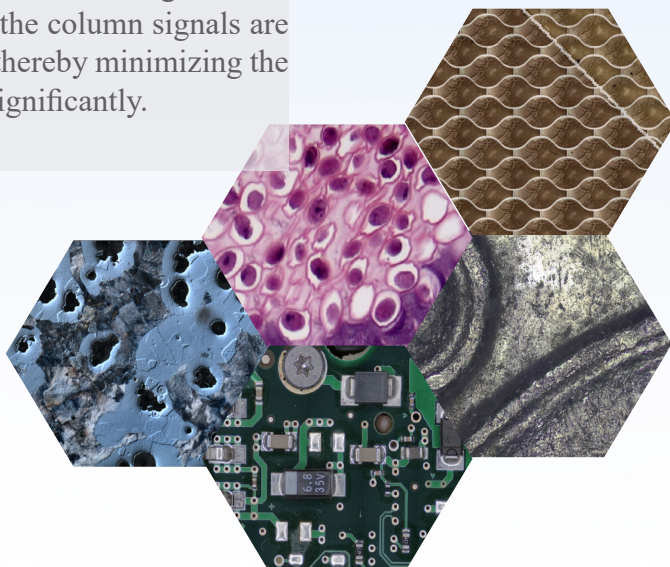
### Sony Exmor™ back-illuminated structure

Sony Exmor™ back-illuminated structure sensor, is developed with the intention of capturing vivid images even in low light settings. "Exmor™" sensor is approximately twice as sensitive as a conventional front-illuminated CMOS sensor and also features low noise. This is due to back-illuminated CMOS sensor, light is directed onto the silicon substrate from behind, allowing light to be used with a level of efficiency not possible with conventional front-illuminated pixel structures.

### Ultra-Low noise images

The Invenio EIII Microscope cameras are built with Sony's newest sensor, the Exmor™ which is a superior sensor for various reasons. This is due to The Exmor™ sensors which digitize the pixels before the column signals are multiplexed, thereby minimizing the noise signal significantly compared to standard CMOS sensors.

The Exmor™ sensors digitize the pixels before the column signals are multiplexed, thereby minimizing the noise signal significantly.



Without Exmor-R Sensor

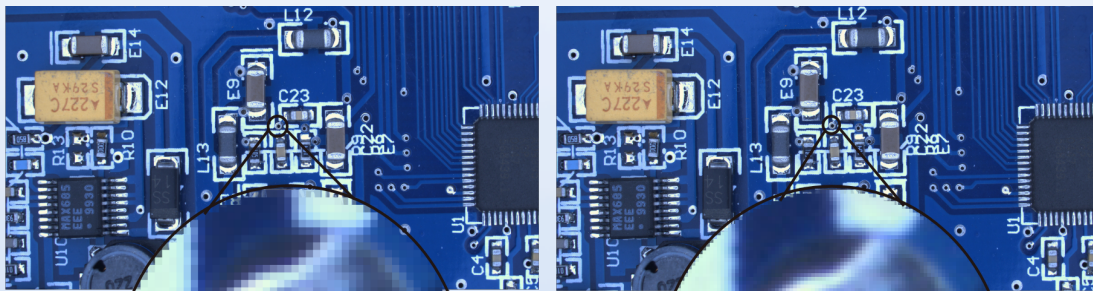


With Exmor-R Sensor

## DeltaPix HDMI4KDPX

### 4K HDMI Microscope Camera

- 8.3 megapixel CMOS colour sensor
- Resolution: 3840 x 2160 pixels
- Live image: 30 fps with 3840 x 1160 pixels
- Live image: 60 fps with 1920 x 1080 pixels



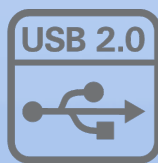
**Full HD**  
**1080**

**4K**  
**ULTRA HD**

## DeltaPix HDMI16MDPX

### HDMI Microscope Camera

- USB 2.0 and HDMI interface
- 6.0 megapixel CMOS colour sensor
- Resolution of 3264 x 2472 pixels
- Live image speed of 30 fps with 1920 x 1080 pixels via USB 2.0
- Live image speed of 60 fps with 1920 x 1080 pixels via HDMI
- Built-in video recording
- Built-in advanced measurement/ or without



The HDMI16MDPX, high resolution colour camera is packed with many innovative features to simplify your work. The HDMI16MDPX is the perfect solution for professionals in need of an accurate measurement tool in fields of industry, research, medicine and science.



## ***DeltaPix Infinity X-32***

### **USB 2.0 Pixel-shifting Microscope Camera**

- 32 megapixel, pixel shifting camera.
- 2, 8, 16 and 32 megapixel still image resolution.
- Highly sensitive, low noise CCD with remarkable colour quality for the most demanding applications
- Up to 30 fps
- 8 & 12-bit selectable output format.



Infinity X-32 - Up to 32 MPix, Colour CCD pixel-shifting colour 32 Million Pixels and Streaming Video The Infinity X-32 Mega Pixel camera, is designed to satisfy the unique and various demands of digital microscopy.

It offers exceptionally fast streaming video at high resolution on the computer monitor as well as outstanding resolutions on still images. The impressive performance and revolutionary resolution of the Infinity X is achieved by combining state-of-the-art sensor design with innovative engineering.

A ground-breaking resolution of up to 32 million pixels in precise colour puts the Infinity X in a class all of its own. These incredible resolutions are achieved using DeltaVu™, a highly successful, patent pending technology invented by DeltaPix.

## ***DeltaPix Invenio SIII Series***

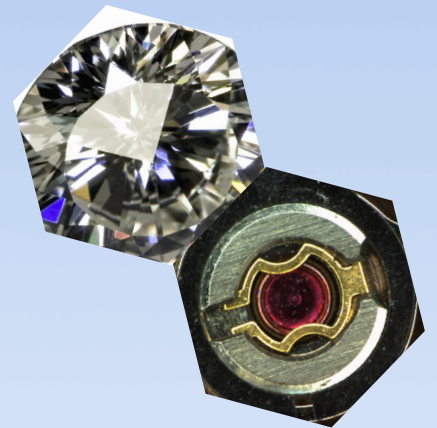
### **Invenio SIII features:**

- USB 3.0 interface
- 5/10 megapixel CMOS sensor
- Live image speed of up to 101 fps.
- Perfect image and colour quality



Capture sharp and vivid images for everyday analysis and documentation with the Invenio SIII colour camera series. The Invenio SIII cameras are designed as a multipurpose, simple and affordable solution that simplifies the imaging process from capture through to image handling. The Invenio SIII cameras are available in 5 Megapixel and 10 MegaPixel.

Ideally suited for life science, material science and industrial applications such as quality control and failure analysis.



## ***DeltaPix InSight Software***

### **DeltaPix Insight Features**

- Measurement and Annotation
- Reporting
- Extended Focus
- Topography 3D
- Automatic and manual image stitching
- Object Counting



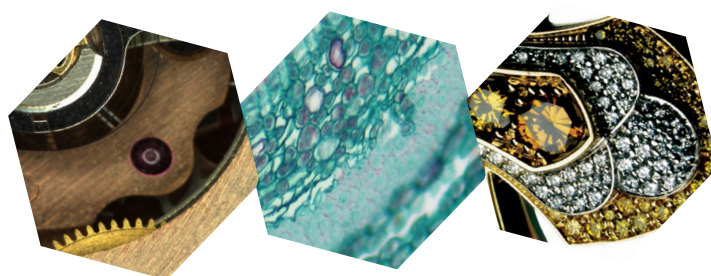
DeltaPix InSight has a modern and intuitive user interface based on the ribbon band style known from Microsoft Office 2010/2016.

Functionality has been grouped logically, and the program is easy to use. DeltaPix InSight is a modular software allowing the operator to purchase modules as needed making DeltaPix InSight very efficient and affordable.

## Camera selection table

Camera Models							
	Infinity X-32	Invenio 5SIII	Invenio 10SIII	HDMI4KDPX	HDMI16MDPX	Invenio 2EIII	Invenio E6III
Sensor size	1/ 1.8"	1/ 2.5"	1/ 2.2"	1/ 1.9"	1/ 2.8"	1/1.9"	1/1.8"
Exposure time range, live (ms)	0.01-10000	0.05-2000	0.38-2000	0.001-10000	0.001-10000	0.244 - 1000000	0.244 - 1000000
Exposure time range, snapshot (ms)	0.01-30000	⊘	⊘	⊘	⊘	-	-
Sensitivity (1-5*, 5* is best)	★★★★	★★	★★	★★★	★★★	★★★★	★★★★
Frame rate at max resolution	13	14	7	30/60	60	30	15
Max framerate in subsampling mode	30	39	25	-	-	45	25
Max resolution	6400 x 4800	2560 x 1922	3560 x 2748	3840 x 2160	3264x 1840	1280 x 1200	3072 x 2048
Individual test certificate	✓	✓	✓	✓	✓	✓	✓
Sealed dust proof sensorchamber	✓	✓	✓	✓	✓	✓	✓
HQ IR-filter	✓	✓	✓	✓	✓	✓	✓
DeltaPix "DeltaVU" pixel shifting technology	✓	⊘	⊘	⊘	⊘	⊘	⊘
Binning	✓	⊘	⊘	⊘	⊘	✓	✓
Gain	1-8	1-16	1-16	?	1-20	1-50	1-50
Recommended applications							
Brightfield / Darkfield	★★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★★
DIC	★★★★★	★★★	★★★	★★★★	★★★★	★★★★	★★★★
Live cell imaging	★★★★	★★★	★★★	★★★★	★★★★	★★★	★★★
Histology/Pathology/ Cytology	★★★★★	★★★	★★★★	★★★★★	★★★★	★★★★	★★★★★
Semiconductor inspection	★★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★	★★★★★
Metrology	★★★★★	★★★★	★★★★	★★★	★★★	★★★	★★★★
Documentation and Archiving	★★★★★	★★★★	★★★★	★★★	★★★★	★★★	★★★★★
Moderate light fluorescence	★★★★★	★★	★	★★★★	★★★★	★★★★	★★★★
Low light fluorescence	★★★★	★	★	★	★★	★★★	★★★
Macro Imaging	★★★★★	★★★	★★★	★★★	★★★	★★★	★★★★
GFP, FISH, NIR	★★★	★★	★★	★★	★★	★★★	★★★★
Luminescence	★★★★	★	★	★★	★★	★★★★	★★★★
HD Video High Speed	★★★	★★★★	★★★★	★★★★★	★★★★★	★★★★★	★★★★★

Functions and specifications



<p><b>Minimum Computer Platform</b>  <b>Intel I5 (quad core) CPU</b>  <b>4 GB RAM</b>  <b>15 GB free harddisk space</b>  <b>USB 2.0 - 3.0 port</b>  <b>Windows 7,8 ,10 32 and 64 bit</b></p>
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