Vineon Technology

Your partner in digital imaging

usb.camera

uPiX UCV-Series

USB3.0 CMOS Camera

UVC Class Camera

Compact size

Plug & Play - USB video class

Features:

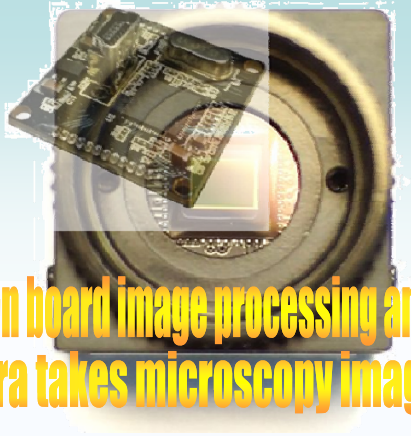
USB3.0 easy connection- No external power required
Excellence color reproduction
Excellence image quality
Optimized for High Frame Rate
On board hardware image signal processor
Directshow WDM driver
And many other features

Applications:

Microscopy
Machine Vision
Medical Imaging
Visual Inspection
Security
2D Barcode & OCR Reading
Other digital imaging applications

Bundled with Image Measurement Software VIS Plus v3.60 !

(Lens not Included)*



By combining the on board image processing and new imager technology uPix-UCV camera takes microscopy imaging to another level

UCV USB3.0 Series consists of high-performance low cost digital cameras with ISP on board provides unique combinations of speed, resolution, image quality and sensitivity to satisfy the demands of today's imaging applications. UCV series camera is a UVC device, USB video device class (also USB video class or UVC), a USB device class that describes devices capable of streaming video.

- Various models with different imager characteristic and camera mode for different applications.
- Plug & Play – Driverless for Windows (**Windos 8 & above**) and Linux (2.6.26 & above).
- Simple & Easy one USB3.0 cable provides power, video and camera controls
- Unique optimized on board processing design for faster frame rate (high quality MJPEG)
- High sensitivity are achieved through the adoption of Sony Exmor® sensors and it's on board hardware ISP (Image Signal Processor) produces high dynamic range and sharper image besides increasing the frame rate by output high quality MJPEG at 5MP 25FPS and Full HD 60FPS on USB3.0

Hardware and Software requirements

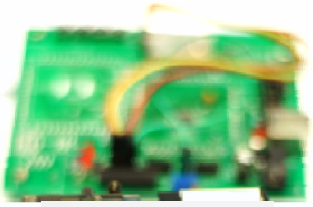
The UCV 3.0 cameras need the following system requirements:

- **Windows 8.0 and above** for Compatible UVC USB3.0 Support
- **USB 3.0** on board Interface
- Intel i3 series or above CPU with a clock frequency of at least 2.0 GHz or higher

Supported Interface	Host Controller	Comment
USB 3.0	xHCI	full support
USB 2.0	EHCI	support but slower
USB 1.1 / 1.0	OHCI / UHCI	no support

Application Notes:

- we prefer PCs with USB 3.0 on board. PCI or PCMCIA USB 3.0 adapters may have a lower performance
- the UCV cameras need a "full powered" USB 3.0 interface (with 900mA)
- use only USB 3.0 cables for "high speed"



(Lens not Included)*

Technical Data

CMOS Sensor	UCV5300
Image Sensor	Sony Exmor Back illuminated Cmos Image Sensor
Special Features	Built In ISP High Sensitivity & FPS
Sensor Size	1/2.5"
Effective pixel (MP)	5
Resolution	2592x1944
Frame Rate (Full Res)	**25** (YUY2 on USB3.0 / MJPEG on USB2.0)
FPS at Sub-Sample	60 (Full HD 1920x1080)
Shutter	Half Global
Output Format	YUY2 / MJPEG
Exposure Time (Freerun)	0.07 - 207ms
Sensor D/R Level	67.4dB
Pixel Size (µm)	2.2x2.2
Imaging Area (mm)	5.70x4.28
Sub-Sampling Modes (Binning or Skipping)	2592X1944 ,2048X1536, 1920x1080, 1600X1200, 1280X720, 1024X768, 800X600, 640X480
Housing Size	50 x 50.5 x 39mm
Dynamic Range	ADC:10bits ; Output: 8bits per Channel
USB Version	USB3.0
Lens Mount	C / CS Mount
Power Supply	<1.5 Watt
Operation Temperature	0° - 60° Celsius
Operating Humidity	80 % non-condensing