MODEL NAME	**VisiCam 16 plus**
ECN#	**630-2919**
SHORT DESCRIPTION	**16 Megapixel high quality USB3.0 camera**





LONG DESCRIPTION

Camera equipped with 16 Megapixel color CMOS 1/2.33'' sensor. Thanks to the high speed data transfer of USB 3.0 connection and to the high-resolution CMOS sensor, this camera is perfect for your demanding works in the laboratory.
The professional software "WaveImage" is included, to preview and capture images & video for analysis and processing, thanks to the many included functions.

Camera Specifications	
Resolution	16 Megapixel (4648x3506)
Sensor Type	Panasonic MN34120 CMOS
Sensor Size	1/2.33"
Max frames/sec **Binning**	6fps @4632x3488 Binning 1x1 15fps @2320x1740 Binning 2x2 26fps @1536x1160 Binning 3x3
Pixel Size	1,355µm × 1,355µm
Color depht	8 bit
Sensitivity	R: 2453LSB; Gr: 2444LSB; Gb: 1054LSB; B: 996LSB [LSB: less significant bit]
Data inferface	USB3.0 5Gbit/second (ensuring high speed data transmission)
Exposure Time	0,1 msec. – 2000 msec.
Exposure control	Automatic / Manual
White Balance	ROI White Balance/ Manual
Spectral range	380-650nm (with IR-cut Filter)
Operating Temperature	-10°C up to + 50°C
Operating humidity	30% to 80% RH not consending
Power supply	DC 5V over PC USB Port
Capture / Control API	Native C/C++, C#/VB.NET,DirectShow, Twain and Labview
Dimensions/Weight	68x68x46mm / 300g
Lens Mount	Standard C-mount

WaveImage Image Analysis Software for PC. Main functions:	
Exposure & gain	Auto and manual exposure; up to 5 times gain
White balance	Advanced single-click intelligent white balance setting, temperature and tint can be adjusted
Color adjustment	Hue, saturation, brightness, contrast, gamma adjustment
Power frequency	Natural light/DC, AC 50Hz, AC 60 Hz switch function to eliminate video flickering
Flip	Horizontal or vertical flip to correct sample direction
Skip and bin sampling	Bin mode can obtain low noise video stream; Skip mode obtains sharper and smoother video stream. Support video stream histogram extension, Negative and positive switching, Gray calibration, Clarity factor for focusing etc.
Parameters	Load, save, import, export self-defined parameters of camera control panel (including calibration information, exposure and color setting information)
	Image analysis functions
Video functions	Video broadcast; Time-lapse capture; Video record; Video watermark; Move watermark; Rotate watermark; Video stream grid; Video measurement; Video calibration, Gray calibration; Video EDF; Image stitch; Video scalebar, date and etc.
Processing and enhancement	Control and adjust image by contrast, denoise, all kinds of filtering algorithm and mathematical morphology algorithm; image rotate, image scale, image print
2D Measurement	Easy video or image calibration. Various video and image measurement methods like area, perimeter, angle etc. Measurementre sults can be hierarchical controlled according to characteristics or preferences;
Image Stitching	Image stitching can automatically combine a sequence of relevant images into a perfect larger one. No requirement on the image order;
Extended depht of focus (EDF)	Aimed at generating a clearer image by combining a sequence of previously captured multi-focus images; Support video window, image window, browse window EDF operation. Provided with maximum contrast, weighted average, FFDSSD algorithms to meet with most applications. Consider image shift, rotation and scale in the EDF process
Segementation and count	Integrate the advanced 6 image segmentation and particle counting algorithm (Watershed(W), OTSUDark, OTSU Bright, RGB Histogram, HSV Histogram and ColorCube). Manual segmentation function (Split objects) ensures the success of a complete segmentation. The count result can be exported to Microsoft Excel for further analysis
Image stacking	Image stacking adopts advanced image matching technology. Regardless of shifting, rotation, scaling, the high fidelity image can be stacked to decrease image noise.
Color composite	Color composite adds appropriate pseudo color to monochrome fluorescence images. Fluorescence probe and color can be chosen from the pre-defined database. Dye database can also be easily created for special fluorescence probe.

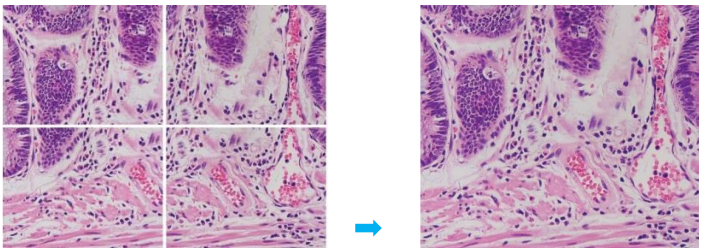
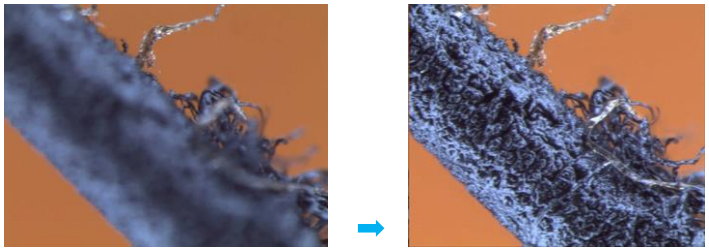


Image Stitching



Extended Depht of Focus

	Compatibility
Video interface	Support Twain, DirectShow, Labview, SDKPackage （Native C++、C#)
Operating system	Compatible with Microsoft® Windows® XP / Vista /7 / 8 /10 (32 & 64 bit), Mac OSX, Linux
Language support	Unlimited language support, currently available in English, Catalan, French, German, Indonesian, Italian, Japanese, Korean, Polish, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, and Turkish
	System Requirements
CPU	Intel Core 2 2.8GHz or Higher
RAM	2GB or more
USB port	USB2.0 or USB3.0
Monitor	17”or Larger
Reader	CD-ROM reader

Package includes:	
	Camera, calibration slide, 2m USB cable, eyepiece adapter, ring adapters (30mm & 30.5mm), CD-rom with Image Analysis software, documentation



Key features:

- Professional Image analysis and procesing Software
- Windows/Linux/Mac OS multiplatforms compatibility
- Rugged zinc aluminum alloy housing