



MODEL NAME	Eyepiece camerera
ECN#	611-2257
SHORT DESCRIPTION	1,3 Megapixel Eyepiece USB2.0 camera

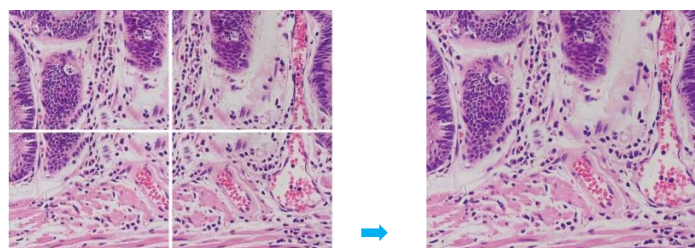
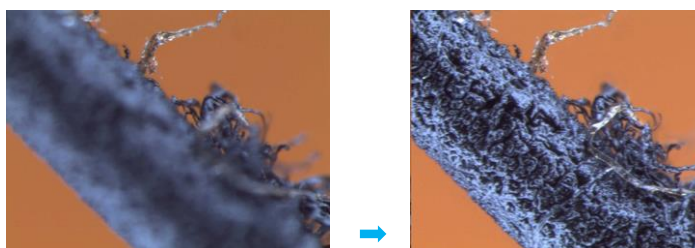


LONG DESCRIPTION Camera equipped with 1,3 Megapixel color CMOS 1/3" sensor. The shape of the camera fits into eyepiece tube of biological binocular and monocular microscopes allowing to digitalize images also when microscope does not have a trinocular port. Thanks to the included 30mm & 30,5mm ring adapters the camera can be also fitted to stereo microscopes

The camera benefits of the included software "WaveImage" derived from higher-end models, to preview and capture images & video for image analysis and processing, thanks to the many functions.

Camera Specifications	
Resolution	1,3 Megapixel (1280x1024)
Sensor Type	APTINA Color
Sensor Size	1/3"
Max frames/sec	7.5 fps @ 1280 x 1024
Binning	12.5 fps @ 1024 x 768
Pixel Size	3,6µm × 3,6µm
Scan mode	Progressive
Shutter	Rolling
Color depht	8 bit
Data interface	USB2.0
Exposure Time	Automatic
Exposure control	Automatic
White Balance	Automatic
Recording	Images and Video
Spectral range	380-650nm (with IR-cut Filter)
Operating Temperature	-10°C up to + 50°C
Operating humidity	30% to 80% RH not condensing
Power supply	DC 5V over PC USB Port
Capture / Control API	Native C/C++, C#/ VB.NET, DirectShow, Twain and Labview
Dimensions/Weight	Ø27,2mm x Ø23,2mm x 40mm / 300g
Mount	Eyepiece tube diameter 23,2mm (also 30mm and 30,5mm thanks to ring adapters included)

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
Black balance	Automatic or manual balancing of black level
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
Image analysis functions	
Video functions	Video broadcast; Video record
2D Measurement	Easy video or image calibration. Various video and image measurement methods like area, perimeter, angle etc. Measurement results 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 depth 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
Segmentation and count	Integrate the advanced 6 image segmentation and particle counting algorithm (Watershed(W), OTSU Dark, 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.

**Image Stitching****Extended Depth 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
Monitor	17" or Larger
Reader	CD-ROM reader

Package includes:	
	Camera, USB cable, ring adapters (30mm & 30.5mm), CD-rom with Image Analysis software, documentation



Key features:

- Can be also used with monocular and binoculars, and also with stereo thanks to ring adapters
- Windows/Linux/Mac OS multiplatforms compatibility
- Shares the same software of higher-end cameras