

# TCAW Cameras for Compound Microscopes COLO



The COLO TCAW series USB/HDMI/Wi-Fi camera with C-mount provide you simple and high-quality method to upgrade microscopes. The USB camera replaces or supplements the standard eyepiece of a microscope. The supplied software enables measurements (lengths, areas, angles, circles, etc.) and image comments, single images and film recordings - ideal for quality control and assurance, use as teaching aids, for demonstration purposes and presentations, school, hobby and job. The camera can be connected directly to an HDMI monitor, the ToupCam-View software superimposes the monitor image with the controls, which are then controlled via the mouse on the camera's USB port or via Wi-Fi computer, tablet or smart phone (smart phone included). Wireless and HDMI can be operated in parallel. Signal via USB 2.0/3.0 or high speed Wi-Fi network. The Sony IMX back-illuminated sensor is tuned for low-light applications including fluorescence.

- Features:
- HDMI/USB/Wi-Fi Connection
  - Live video preview
  - The camera can operate in standalone or PC/Tablet/Smart phone connected mode using built-in tools for capturing and editing images and video.
  - Captures still images and video directly or remote
  - Exposure and white-balance controls
  - Image-stitching, extended depth-of-field, HDR
  - Dark-field correction
  - Digital binning
  - Image processing
  - Live/Video full HD resolution 1920x1080 30 FPS
  - Photo format resolution 2592x1944
  - Measurement tools in software including lines, arcs, polygons, calibration...

 **HDMI/USB/Wi-Fi Data transfer**

 **Full HD 1920x1080 resolution 5MP/**  
Photo format resolution 2592x1944

 **Auto focus - Optional**

 **Spectral response – 380-1000nm with IR-Cut Filter**

 **Capture camera control with android Phone - Included**

COLOCam	TCA50W	TCA51W	TCA52W	TCA50TW
SKU	PRO4811	PRO2122	PRO2123	PRO2124
Price EUR				
Spectral Response	380-1000 nm with IR-cut filter			
Output	HDMI, USB2.0/3.0, USB Mouse, Wi-Fi,			
Resolution Live/Video	1920X1080 HDMI – 5MP	1920x1080 HDMI – 2MP	1920x1080 – 2MP	3840X2160 HDMI – 8,3MP
G Sensitivity	425 mv with 1/30s	1120mv with 1/30s	1016 mv with 1/30s	2188mv with 1/30s
Fps	30@1920x1080			
Pixel Size	2.4µm x 2.4µm	3.75µm x 3.75µm	5.86µm x 5.86µm	2.9µm x 2.9µm
Exposure	0.03ms~918ms	0.06ms~918ms	0.043ms~1000ms	0.043ms~1000ms
Sensor Type	Sony IMX178(C) 1/1.8"(6.22x4.67)	Sony IMX185(C) 1/1.9"(7.20x4.05)	Sony IMX249(C,GS) 1/1.2"(11.25x6.33)	Sony CMOS sensor IMX334C - 1/1.8 "(7.68 x 4.32 mm)back-illuminated
Dark signal	0.15 mv with 1/30s	0.39mv with 1/30s	0.21 mv with 1/30s	2188mv with 1/30s
Binning	1 X 1			
Reduction Lens	0.75X (optional)			
Internal Recording Media	SD Card 8 GB			
Internal Video Capture Format	MP4			
Wi-fi Standard	802.11ac 2.4GHz/5GHz			
Lens Mount	C-Mount			
Internal Photo Capture Format	JPG,JP2,PNG,TFT,TIF,WEBP			
OS Requirements	Windows (32/64 bit) XP/Vista/7/8/10, Mac OS 10.8+, Linux kernel 3.13+/Android/Apple			
Hardware Requirements	Intel Core2 2.8GHz or comparable processor, 4GB RAM			
Power Supply	12VDC 2A			
Dimensions W*D*H	78mm x 70mm x 92mm			
Operating Temperature	-10-50°C			
Operating Humidity	30-80% RH			
Standard Packing (One pc each)	Microscope Camera, 8GB SD Card, HDMI Cable, USB Wi-Fi Adapter, AC Power supply, USB with Software, Smart phone with software for wireless camera control			