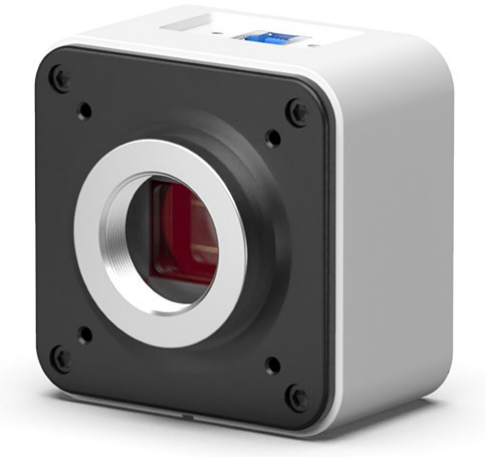
MIchrome 16 Color Microscope Camera, 16 MP, 1.34 µm Pixels, USB 3.0

Model MIchrome 16 · waveqvanta.com/products/michrome-16-microscope-camera

A 16 MP color microscope camera for brightfield imaging, with live stitching and extended depth of field.



The MIchrome 16 is a 16 MP (4608 × 3456) color camera with 1.34 µm pixels, intended for brightfield and open-field microscopy where true color and fine detail matter. It runs at 12 fps at full resolution over USB 3.0, and up to four units can be operated together through the SDK.

Key features

- 4608 × 3456 (16 MP) Sony color CMOS sensor with 1.34 µm pixels and a 7.77 mm diagonal
- 12 fps at full resolution; 15 fps at 4608 × 2736 and 19 fps at 3648 × 2736
- Live stitching builds large panoramic images within seconds while the stage is moved
- Live EDF merges different focal planes into one extended-depth-of-field image as the focus is turned
- Wide color temperature adjustment (2000–15000 K) for accurate white balance straight from the camera
- Up to four cameras can run at the same time through the SDK (C, C++, C#, DirectShow, TWAIN)
- Exposure from 22 µs to 26 s; images saved as TIF, JPG, PNG or DICOM

Specifications

Sensor Type	Sony CMOS
Color / Mono	Color
Resolution	4608 × 3456 (16 MP)
Pixel Size	1.34 µm × 1.34 µm
Effective Area	6.2 mm × 4.6 mm
Array Diagonal	7.77 mm
Frame Rate	12 fps @ 4608 × 3456; 15 fps @ 4608 × 2736; 19 fps @ 3648 × 2736
Shutter Type	Rolling
Exposure Time	22 µs – 26 s
Binning	2 × 2, 3 × 3, 4 × 4
Bit Depth	8-bit, 16-bit
Color Temperature	2000–15000 K
Data Interface	USB 3.0
Optical Interface	C-mount
Power Consumption	3 W
Dimensions	68 mm (H) × 68 mm (W) × 46 mm (L)
Weight	330 g
Operating Environment	Operating −10 to 45 °C, 10–85% RH
Image Format	TIF, JPG, PNG, DICOM
Multi-Camera	Up to 4 cameras simultaneously via SDK

Software / SDK Support	Acquisition and analysis software; SDK: C, C++, C#, DirectShow, TWAIN
Operating System	Windows 10/11 (64-bit), Mac
PC Requirements	Intel Core i5 quad-core or higher, 8 GB RAM or more

Typical applications

- Biological brightfield microscopy with live stitching
- Stereo microscopy with live EDF (e.g. insects)
- DIC microscopy
- Polarized-light and metallographic microscopy (e.g. rock thin sections)