GT 12 USB 2.0 Color Microscope Camera, 12 MP, 15 fps

Model GT 12 · waveqvanta.com/products/gt-12-microscope-camera

12 MP color camera for detailed, economical microscope imaging over USB 2.0.



The GT 12 is a compact 12 MP color CMOS camera for everyday microscope imaging. On-camera graphics acceleration raises the frame rate available over USB 2.0 while keeping the original image output, giving 15 fps at 4000 × 3000. The bundled acquisition and analysis software handles capture, processing, measurement and reporting, with automatic exposure and white balance.

Key features

- Sony color CMOS sensor: 4000 × 3000 (12 MP), 1.34 µm pixels, 7.77 mm diagonal
- Graphics acceleration delivers 15 fps at full resolution over USB 2.0 without altering the original image output
- Color algorithms tuned for color accuracy on biological samples and for strong metal reflections in industrial inspection
- Software covering capture, processing, measurement and reporting, with automatic exposure and automatic white balance
- SDK for C, C++, C#, DirectShow and TWAIN; up to 4 cameras can run simultaneously via the SDK
- Standard C-mount, 2 W power consumption, 68 × 68 × 42.5 mm, 236 g

Specifications

Sensor Type	Sony CMOS
Color / Mono	Color
Resolution	4000 × 3000 (12 MP)
Pixel Size	1.34 × 1.34 µm
Effective Area	5.4 × 4.0 mm
Array Diagonal	7.77 mm
Frame Rate	15 fps @ 4000 × 3000 (USB 2.0)
Shutter Type	Rolling
Exposure Time	1 µs – 1 s 941 ms
Data Interface	USB 2.0
Optical Interface	C-mount
Power Consumption	2 W
Dimensions	68 × 68 × 42.5 mm (H × W × L)
Weight	236 g
Operating Environment	Working: 0–40 °C, 10–85% RH
Image Format	TIF, JPG, PNG, DICOM
Multi-Camera	Up to 4 cameras simultaneously (via SDK)
Operating System	Windows 7 / 10 (32-bit / 64-bit), Mac
PC Requirements	Intel Core i5 quad-core or higher; 8 GB RAM or more
Software / SDK Support	Acquisition and analysis software; C / C++ / C# / DirectShow / TWAIN SDK

Typical applications

- Pathology imaging on biological microscopes
- Biological microscopy of plant and insect specimens
- Stereo microscopy of objects such as coins
- Basic microscope imaging and documentation