TrueChrome Metrics HDMI Microscope Camera, 1080p, Built-in Measurement

Model TrueChrome Metrics · waveqvanta.com/products/truechrome-metrics-microscope-camera

A 1080p HDMI microscope camera with on-board capture and measurement tools, operated without a computer.



The TrueChrome Metrics is an HDMI microscope camera based on the Sony IMX307LQR-C sensor, delivering 1920 × 1080 live images at 30 fps. Image capture, processing and measurement run on the camera itself, so it can be used with just a monitor and mouse; USB 2.0 and an SD card slot are provided for transferring images.

Key features

- Runs without a PC: capture, process, measure and save directly on an HDMI monitor using a mouse
- Built-in measurement tools: freehand line, rectangle, polygon, circle, semicircle, angle and point-to-line distance, in mm, cm or µm
- Sony IMX307LQR-C color sensor, 1920 × 1080, 2.9 µm pixels, 6.46 mm diagonal
- 30 fps over HDMI and 30 fps (compressed) over USB 2.0
- Still capture at 3264 × 1840 and 1080p video recording at 25 fps
- Color processing tuned so the monitor image matches the view through the eyepiece
- User interface in eight languages, including English, German, French, Italian, Japanese and Korean

Specifications

Sensor Type	CMOS
Sensor	Sony IMX307LQR-C
Color / Mono	Color
Resolution	1920 × 1080 (2 MP)
Capture Resolution (HDMI)	3264 × 1840
Pixel Size	2.9 µm × 2.9 µm
Effective Area	5.6 mm × 3.1 mm
Array Diagonal	6.46 mm
Frame Rate (HDMI)	30 fps
Frame Rate (USB 2.0)	30 fps (compressed)
Frame Rate (Uncompressed)	26 fps
Video Recording	25 fps @ 1080p
Shutter Type	Rolling
Exposure Time	1 ms – 10 s
Color Temperature	1800–10000 K
Data Interface	HDMI, USB 2.0, SD card
Storage	SD card (FAT32)
Image Format	HDMI: JPG, TIF; PC: TIF, JPG, PNG, DICOM
Optical Interface	C-mount
Power Consumption	2.4 W

Dimensions	90.7 mm (H) × 78 mm (W) × 70.8 mm (L)
Weight	448 g
Operating Environment	−10 to 45 °C, 10–85% RH
Multi-Camera	Up to 4 cameras simultaneously via SDK
Software / SDK Support	HDMI: embedded software; PC: acquisition and analysis software
Operating System	Windows 10 (64-bit), Mac
PC Requirements	Intel Core i5 quad-core or above, 8 GB RAM or more

Typical applications

- Biological microscopy (e.g. epiphyseal plate sections)
- Stereo microscopy
- Metallographic microscopy
- Polarizing microscopy