Oqus Video



The high-speed video camera for your Oqus system · Oqus 210 series



Oqus Video (also known as Oqus 210c) is a synchronised and dedicated video camera that can be calibrated together with an Oqus motion capture system, providing a video image that is fully synchronised with the mocap system.

The camera is automatically calibrated together with the rest of the system, without the need for manual intervention. This makes it effortless to get 3D data overlaid on top of the video image, which provides additional visual aid for the user.

With its on-board MJPEG encoder, the camera is able to stream full HD video (1080p) at 24 frames per second. If you don't need the full 2 megapixel resolution, you have the option to trade pixels for speed. Run 60 fps with full field of view or 95 fps at VGA resolution.

FEATURES

- Seamless QTM integration
- High-speed color video
- 3D data overlay (when calibrated together with mocap system)
- Stream video in 2 MP @ 24 fps or 0.5 MP @ 62 fps
- Record in 0.5MP @ 665 fps (full FOV) and even faster with reduced FOV (buffered)
- Water resistant IP67 housing*
- Run standalone or together with mocap system

One system, one software

In addition to streaming, the camera is also capable of buffering video. This allows you to run 1080p at 337 fps for a shorter time. At reduced resolution it can go above 1000 fps.

Traditionally you would complement your motion capture system with a number of video cameras. Typically requiring additional hardware and software. With the Oqus however, your video and motion capture cameras will play together seamlessly as a single system. No additional software or hardware needed, just setup the camera in QTM like any other Oqus camera.

Note that the Oqus 210c cannot be used to capture markers, except during calibration.



3D data overlay

When the camera is calibrated together with the mocap system, 3D data can be aligned and drawn on top of the video image.



Qualisys Track Manager

Video from the Oqus camera integrates seamlessly into the QTM software.

Specifications

Camera type	Synchronised color camera	
High speed video	Yes	
Video overlay	Yes, through regular wand calibration	
On-board compression	MJPEG	
Lens	8.5 mm, 64° x 39° FOV	
	12.5 mm, 46° x 27° FOV - Standard lens	
	25 mm, 24° x 14° FOV	
Strobe type	White LEDs	
Synchronization options	Internal 1ppm clock/ext. freq. output/ext. word clock. input/smpte input	
Cabeling	Hybrid cable with Ethernet and power	
Wired communication	Hub-less daisy-chained Ethernet 802.3 @ 100Mbps	
Power	Daisy-chained, 36-72 VDC @ 30 W maximum	
Operating temperature	0-35 °C	
Camera body	Dimensions:185 × 110 × 124 mm (7.3 × 4.3 × 4.9 inches) Weight: 1.9 kg (4.2 lbs)	

Frame rates

Resolution	Recording video	Streaming video
Full HD / 2 MP / 1920 × 1080	337 fps (full FOV)	24 fps (full FOV)
0.5 MP / 960 × 540	665 fps (full FOV)	62 fps (full FOV)
VGA / 0.3 MP / 640 × 480	750 fps (reduced FOV)	95 fps (reduced FOV)