

Qualisys Markerless

Combine Qualisys' proven camera technology with the markerless tracking power of Theia software to capture motions when marker-based tracking is not an option.

Whether you run a pure Miquis Video or a hybrid system, Qualisys provides the right platform to collect calibrated and synchronized video data.

Video data is streamed and recorded straight to your computer and ready for processing – there is no need to download data from memory cards. Lean back and let Qualisys Track Manager and Theia do the work.



FEATURES

- Powered by Theia Markerless software
- Biomechanical body model
- Quick and easy system calibration
- Force plate and EMG integrations
- Frame-synchronized cameras
- Expandable to up to 16 Miquis Video or Hybrid cameras
- On-board video compression
- Create reports with your own workflow¹ or benefit from Markerless integrations into Qualisys Analysis Modules²

CAMERA HARDWARE

A typical system consists of 8-10 Miquis Video or Hybrid cameras. Miquis Video cameras may be combined with any Qualisys marker-based camera system. Miquis Hybrid cameras are truly versatile and can run either in video mode or marker mode³.

SYSTEM SETUP

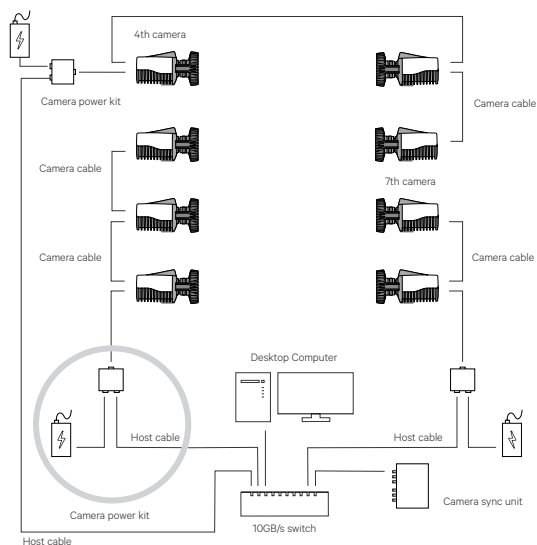
Set up, calibration and synchronization with force plates, EMG or other external equipment works just the same as for a marker-based system.

STREAMLINED WORKFLOW

The Open Module for Theia¹ provides a straightforward structure to manage and process your measurements – simply click “Start Processing”. The module integrates with Visual3D for biomechanical processing.

ANALYSIS MODULES

Most Qualisys Analysis Modules include an option to run markerless². The output is the same comprehensive web report that you get from marker-based data.



Setup for an 8-camera Miquis Hybrid / Video system for markerless.

External Hardware Integrations

Collect synchronized data from all major force plate and EMG systems alongside your markerless captures measurements.

Automated Markerless Tracking

Markerless tracking with Theia is fully automated – there is no need for manual interventions to “help” the algorithm.

Go Hybrid

Switch between markerless or marker-based mode with Miquis Hybrid cameras or add Miquis Video cameras to your system.

MARKERLESS PROCESSING OPTIONS WITH QUALISYS AND THEIA

	THEIA	THEIA + V3D	THEIA + V3D + Open Module ¹	THEIA + V3D + Analysis Module ²
Markerless Tracking	✓	✓	✓	✓
Biomechanical Analysis		✓	✓	✓
Streamlined workflow for custom movement			✓	
Streamlined workflow and comprehensive web reports				✓

¹ Available on <https://github.com/qualisys/paf-resources> (no extra license required)

² Markerless Tracking is available in the Gait, Functional Assessment, Baseball and Running module.

³ Recommended for indoor use only.