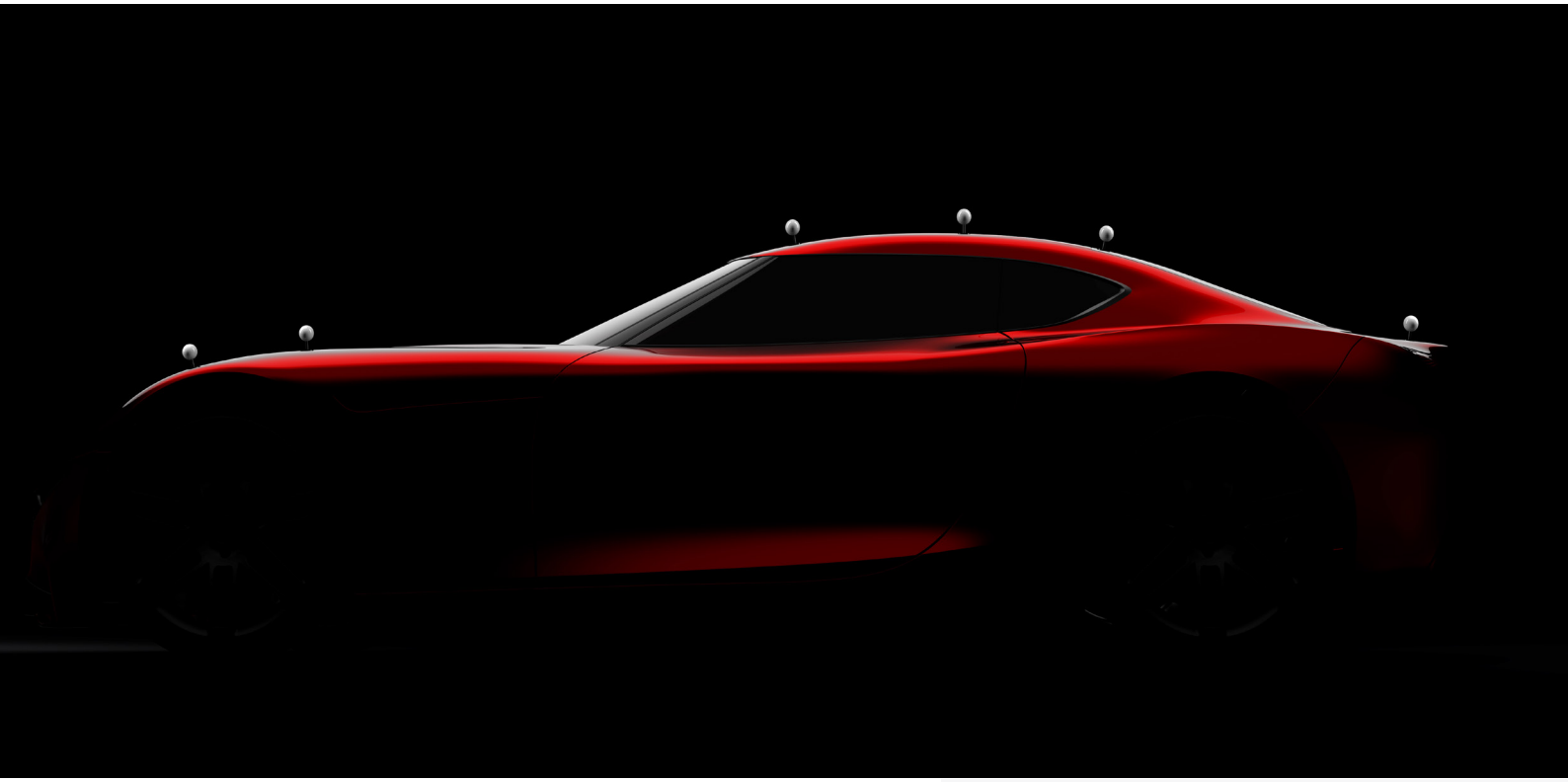
QUALISYS
Motion Capture Systems



Driving innovation

Qualisys motion capture systems measure dynamic movement of both position and orientation of a vehicle to provide real-time validation - "ground truth data" - in the development of new technologies. In this field Qualisys are the gold standard for testing and validation of sensors.

AUTONOMOUS VEHICLES

Motion capture systems can provide precision data that validates the accuracy of lidar, radar and other sensors and is helpful in refining performance in complex scenarios such as the transition from roads to indoor surrondings.

The "ground truth" visualizations produced in 3D and in real-time by Qualisys systems are essential in confirming that the diverse technologies required to power autonomous vehicles are working individually and in harmony. With Qualisys mocap systems, you get accurate data, syncronized with other external time based systems. Qualisys systems can be used for both indoor and outdoor testing to measure the motion performance in autonomous cars

FEATURES

- Ground truth data
- For indoor and outdoor testing
- Measure in sunlight
- 3D visualizations and real-time data
- Accurate data at large distances

COMPONENTS

Many kinds of movements in vehicles can be measured using a Qualisys system. As an example it could be used for identifying unwanted movements in the engine house. Qualisys cameras mounted above the engine can measure even the slightest movement that might impact optimal performance.

Another use of motion capture could be to measure wheel and body movements during suspension testing. The real-time data provided can give an accurate picture of the effect uneven road surfaces are having on the performance of various automotive components.

ERGONOMICS

The Qualisys system is an excellent tool for ergonomic design. For example, with vast experience in the study of human biomechanics, our motion capture technology can be used to optimize the set-up of the driver's seat in a truck.

AGVs

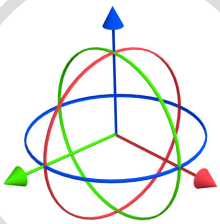
Huge spaces can provide challenges in terms of delivering accurate measurement data at large distances. Qualisys systems are the gold standard in the coverage of large volumes while maintaining high accuracy and precision.

Our cameras can see small markers from a long distance, and that is essential in providing real-time visualizations on the impact of weight on the forks of an AGV, or the optimal pallet-stacking capabilities of a factory vehicle.

RT SDK

Real-time/SDK

Stream motion data over TCP/UDP to your application. Applications already integrated includes MATLAB, LabVIEW, MotionBuilder, WorldWiz, Visual3D, Motek-Caren and Max/MSP/Jitter.



6DOF rigid bodies

QTM allows you to define and edit rigid bodies easily. Once defined, the rigid bodies are automatically identified in real-time using AIM.

IRIG & PTP sync

Choose from a range of different synchronisation possibilities. For example IRIG & PTP.

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