

OptiTrack



**Motion Tracking Solutions for
Ground Truth and Metrology**

OptiTrack **Active**

OptiTrack offers the easiest to use, most precise and most versatile realtime 3D tracking available for:

- HMD tracking.
- Real-time Avatar visualization with full body tracking.
- Tracking vehicles, obstacles, buildings, doors and other fixed or moving objects of interest.

The world leader in precision, low latency, all-in-one tracking systems with over 1,000 VR installations worldwide. OptiTrack delivers:

- Positional accuracy within +/- 0.2 mm even in tracking areas as large as 30 m × 30 m.
- Self-identifying marker tracking with discreet, flush mount LEDs.
- High sample rates, typically 180 Hz or more.
- Track over 300 objects with a single system and single PC.
- Automatic calibration and rigid body refinements make it easy to launch quickly without technical staff.
- Fully integrated Inertial Measurement Unit (IMU) embedded in Active tags and Active pucks, vastly improving rotational consistency when optical markers are lost.
- Native plugins for Unity and Unreal Engine

Active Components



Puck

Convenient, easy to attach lightweight housing which contains one battery powered OptiTrack Active tag assembly. 6 DoF tracking for any object to which it is attached, including hands, feet, and backpack for full body motion tracking.



Base Station

Typically installed at the center of the tracking area, the base station keeps the LEDs synced with the OptiTrack cameras. 100' radius of range to tags. Separate, side-by-side tracking systems available.



Tag

Small, matchbox sized PCB controlling eight LEDs—use one for each object to be tracked. Flush mount 5 mm through hole LEDs that emit a wide-angle invisible IR pulse recognized by Slim 13E and other OptiTrack Prime series cameras.

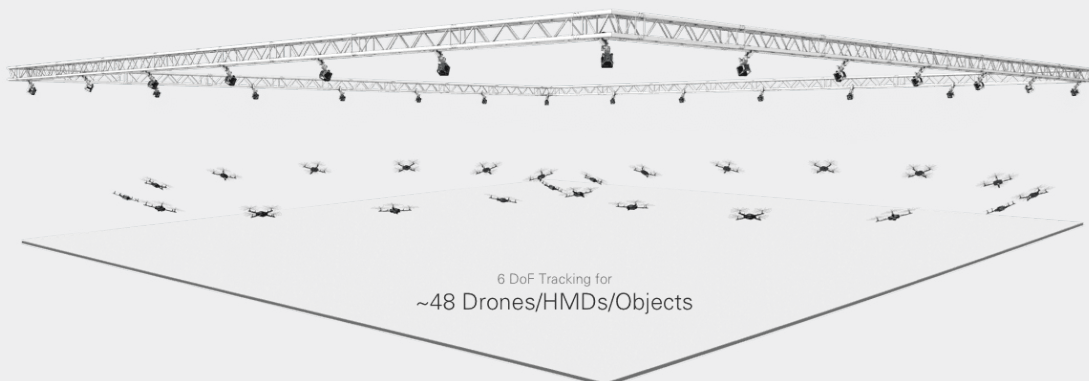
Track Everything

OptiTrack motion capture camera systems offer the flexibility to track both active and passive markers.

Passive Markers or retroreflective markers, including spheres, hemispheres, and even flat reflective discs, are easily tracked with OptiTrack's precision, long range cameras.

Active LEDs are illuminated markers which are synched with the cameras in order to extend battery life, but otherwise have no unique signature and do not communicate their unique IDs to the system.

Signature Pulse Active invisible IR LEDs, enable 100% error free marker ID's, low latency data delivery and <0.1s acquisition time. It's become the benchmark for low latency VR tracking, ground truth systems for AR, and high subject count robotics applications such as drone swarms.



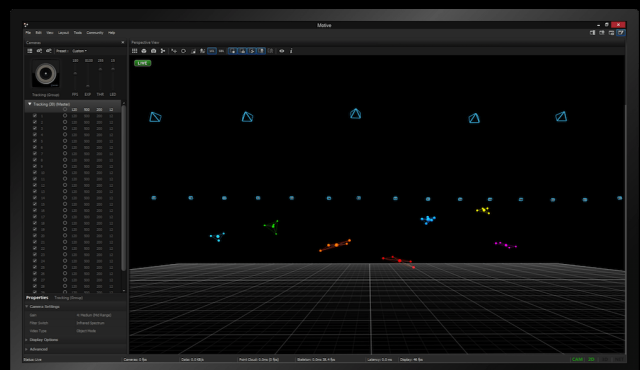


NEW Versa^x Cameras

The Versa^x motion capture cameras are designed for those who demand precision in any environment. It features an IP66 rating and the ability expand its capabilities by adding the optional vStrobe ring light as your projects grow.

Powerful & Flexible Rigid Body Tracking

Set your object's origin and preferred axis easily and accurately; adding or removing markers at any time to ensure perfect tracking. You can even share markers between rigid bodies. Then, use Motive's high-level filters and constraints to fine tune the tracking performance—perfect for demanding applications like high-density, high-speed UAV tracking.



Secondary Ground Truth Measurements

OptiTrack's high-precision motion capture system gives you the ability to generate accurate and reliable secondary ground truth measurements. Compare your autonomous navigation, robotic movements to a sub mm motion capture system to help design better more accurate systems.





Prime^X 120

Megapixel 12.0mp
Resolution 4096 x 3072
Frame Rate 300fps
Lens Option 24mm/18mm

\$10,999



Prime^X 41

Megapixel 4.1mp
Resolution 2048 x 2048
Frame Rate 180fps
Lens Option 12mm/8.9mm

\$6,499



Prime^X 22

Megapixel 2.2mp
Resolution 2048 x 1088
Frame Rate 360fps
Lens Option 6.5mm

\$3,999



Prime^X 13

Megapixel 1.3mp
Resolution 1280 x 1024
Frame Rate 240fps
Lens Option 5.5mm/3.5mm

\$2,499



Slim^X 120

Megapixel 12.0mp
Resolution 4096 x 3072
Frame Rate 300fps
Lens Option 24mm/18mm

\$7,999



Slim^X 41

Megapixel 4.1mp
Resolution 2048 x 2048
Frame Rate 180fps
Lens Option 12mm/8.9mm

\$4,299



Slim^X 13

Megapixel 1.3mp
Resolution 1280 x 1024
Frame Rate 240fps
Lens Option 5.5mm/4.5mm/3.5mm

\$1,699



Versa^X 120

Megapixel 12.0mp
Resolution 4096 x 3072
Frame Rate 300fps
Lens Option 24mm/18mm

starting \$9,499



Versa^X 41

Megapixel 4.1mp
Resolution 2048 x 2048
Frame Rate 180fps
Lens Option 12mm/8.9mm

starting \$5,499



Versa^X 22

Megapixel 2.2mp
Resolution 2048 x 1088
Frame Rate 360fps
Lens Option 6.8mm

starting \$2,999



Learn more at **OptiTrack.com** or scan the QR code.

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