

Wide-area Optical Tracking

PPT (Precision Position Tracking) solutions break the cost-performance barrier, bringing customers high-quality optical tracking to cover very wide ranges (more than 50 x 50 meters) at competitive prices. And the PPT product family continues to grow, bringing more functionality and ease of use to new and existing customers alike. As a real-time system, you get to see tracking results the instant a subject performs a motion. With the system's power and ease of integration with existing real-time rendering tools, the PPT is an ideal solution for real-time applications such as Virtual Reality.



PPT X system, showing two optical sensor tracker with two infrared markers

Optimized for Virtual Reality Applications

PPT tracks large areas (more than 50 x 50 meters) while maintaining high precision and accuracy. It presents excellent value for the real-time demands of immersive virtual reality applications. When combined with an off-the-shelf inertial orientation tracker, a PPT hybrid system provides 6DOF tracking with unparalleled performance and at an unbeatable price. Experience what you have been missing, start tracking wide areas today!

Optical

Optical systems are the most precise,



PPT H system, showing two optical sensor tracker with two infrared markers

Calibration: Easy as one, two, three

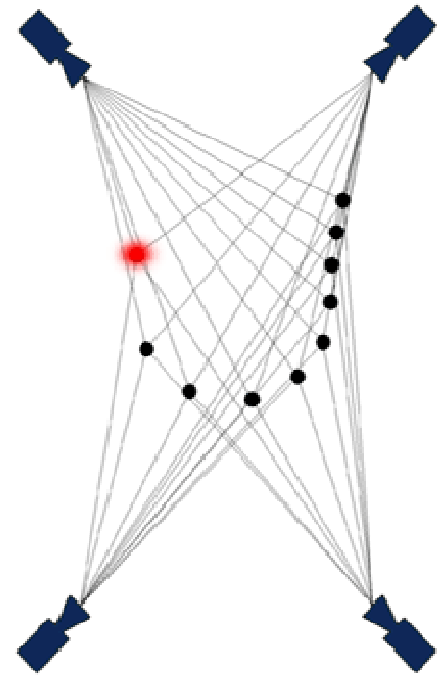
WorldViz uses a high-speed technique that allows users to calibration systems in mere minutes. With the sensors oriented in any way that optimizes your tracking volume, a small four-point calibration board is used for accurately defining the entire tracking volume and XYZ coordinate system. Since our systems uses factory calibrated lenses, you never need to be concerned about obtaining a satisfactory sensor linearization and you can rest assured that your workspace will calibrate quickly and robustly.

Solid Vizard Integration

If you want a guaranteed software solution for developing immersive virtual environments that will work seamlessly with your PPT tracking system, try Vizard risk free now. You'll be surprised how easy custom VR can be.

How Does it Work?

Optical sensors mounted in the corners of a room track active LED markers. As sensors make their way through the room, the sensors acquire data. Through rapid processing, the sensors' data are converted to the accurate three-dimensional location of the markers.



Wide Area

Tracking coverage depends entirely upon line-of-sight between cameras and active LED markers. Systems can include as few as 2 cameras; as long as 2 cameras have the optical targets within view, tracking remains continuous and is not affected by electromagnetic, metallic, or acoustic noise sources. PPT-X is capable of offering full coverage of a 10 x 10 x 3 meter space, while PPT-H offers up to a 50 x 50 x 3 meter space. Tracking beyond these ranges is possible with slightly reduced accuracy and precision if larger areas are required.

Notes

* Actual update rate depends on the number of targets and number of cameras. Please contact WorldViz for details on this

reliable and cost effective solution for wide area position tracking. Two or more optical sensors that are deployed in your workspace track up to 32* visible infrared LED markers at a time. The PPT senses the three-dimensional location of the infrared LED markers and quickly transmits the data to a host computer. With very little effort, PPT can be deployed to track a user in large indoor spaces. WorldViz filtering technology allows undisturbed tracking of persons or objects in brightly lit indoor environments (fluorescent or similar lighting).

tradeoff