

MOTION TRACKING



WIDE AREA – REAL-TIME



Precision Position Tracker

- No range limitations
- Scalable sensors & targets
- Fully wireless targets
- Low latency & high precision
- Optical inertial hybrid
- Instant calibration
- 10 x 10 x 10 meter system from \$9,900



WORLD  VIZ

www.worldviz.com



REAL-TIME MOTION TRACKING

COST EFFECTIVE, WIDE AREAS, SCALABLE

What is PPT?

PPT motion tracking solutions break the cost-performance barrier, bringing you precision 6DOF tracking to cover unlimited ranges at competitive prices. As a real-time system, you see robust tracking during live performances. Fully wireless targets can be easily attached to anywhere on an actor or to external props.

Real-time immersive applications

PPT is ideally suited for real-time applications such as head- and hand tracking for interactive immersive virtual reality applications using head-mounted displays and data gloves.

6DOF interaction wand and CAVEyes

Instantly use PPT with 3D projection systems, stereo projection walls and CAVEs. Move projected 3D objects around with your hand using the PPT 6DOF wireless interaction wand. Clip CAVEyes onto your stereo shutter or polarizer glasses for precise and smooth head tracking with your projection wall.

Autodesk MotionBuilder® ready

Use PPT to track the head, hands, and feet. Directly interface to Autodesk MotionBuilder. Plug-and-Play with WorldViz Live Characters for live mocap integration with Vizard.



Optical inertial hybrid

The WorldViz 6DOF hybrid solution combines the best of two tracking technologies. While optical systems are the most precise, reliable, and cost effective solution for wide-area position tracking, inertial systems are the top choice for precise orientation tracking. The long proven WorldViz hybrid system brings these two worlds together, outperforming traditional systems that rely on only one technology. You will find no other affordable solution providing more stability and precision.



Ease of use

The intuitive graphical user interface includes a wizard for instant calibration using a digital calibration rig. PPT directly connects to the WorldViz Vizard VR toolkit.

Calibration

Takes 1 minute. All systems come with an automatic calibration rig that performs a one-step calibration of the entire system.

PPT X and PPT H series

The PPT X 60Hz series offers economic tracking with very robust performance. Its optical sensors are analog and images are processed in a central CPU. When performance is foremost, the PPT H 175 Hz series offers highest sensor range, largest tracking space, as well as extremely high precision and accuracy. PPT H optical sensors are digital and each has its own onboard processing unit.

TECHNICAL SPECIFICATIONS

EDITION	PPT X	PPT H
Sensor Type	CCD	CMOS
Degrees of Freedom	3DOF optical position (standard) 6DOF including inertial orientation (optional)	3DOF optical position (standard) 6DOF including inertial orientation (optional)
Maximum Number Of Targets	8	32
Maximum Number of Cameras	8	32
Maximum Camera Range	15 m (60 Hz)	20 m (175 Hz) 45 m (60 Hz)
Suggested Tracking Space	10m x 10m x 10m	50m x 50m x 50m
Precision (3m x 3m x 3m volume)	< 1 mm	< 0.25 mm
Accuracy (3m x 3m x 3m volume)	< 0.5 cm	< 0.25 cm
Horizontal Field Of View	68 deg	79 deg
Calibration	1 minute process using rig	1 minute process using rig
Update Rate	60 Hz	175 Hz
Minimum latency	18 milliseconds	9 milliseconds
Image Processing	central CPU	within camera
Maximum Cable Length	75 m	200 m
Camera Interface	analog	digital
Host Interface	RS-232, Ethernet	RS-232, Ethernet
Ambient conditions	Indoor fluorescent only	Indoor fluorescent only
Camera Size	160 x 70 x 60 mm	240 x 57 x 80 mm
Camera Weight	500 g	900 g
Software Support	Directly connect to WorldViz Vizard VR toolkit; VRPN based support for all other applications	Directly connect to WorldViz Vizard VR toolkit; VRPN based support for all other applications



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