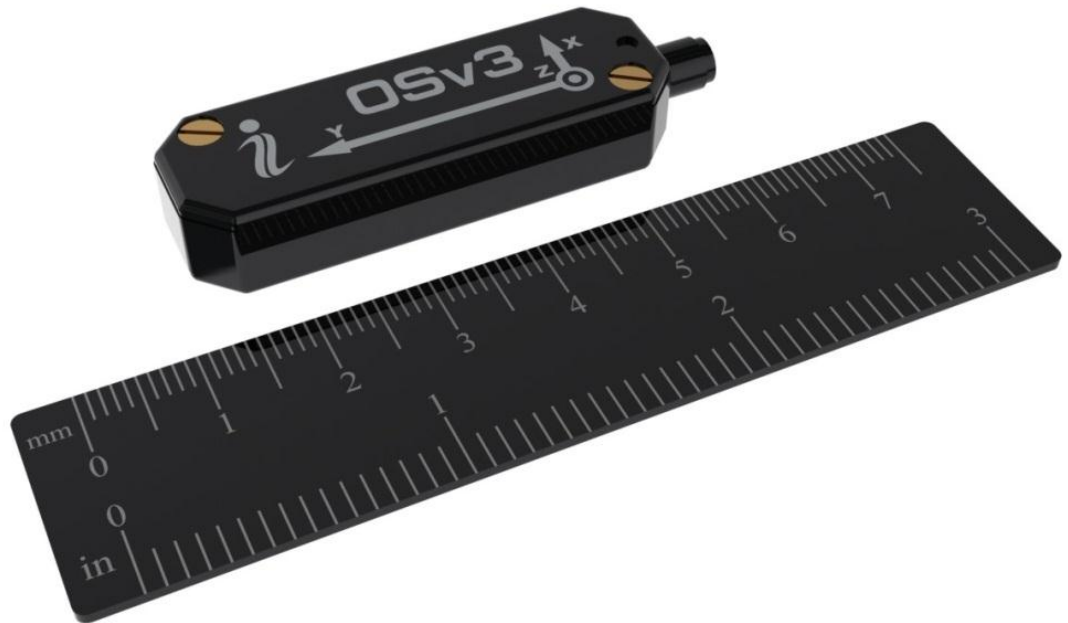




3DTracker



***The Next Generation in Motion
Capture is here!***

www.3dsuit.com



3DTracker mounted to
the NVIS nVisor HMD



Real-time Head Tracking for under \$1K!

3DTracker is...

- | | |
|-------------------|---|
| Capable | Using the Inertial Labs OSv3 sensor, 3DTracker provides accurate tracking with imperceivable lag. |
| Affordable | At just under \$1K, there is no comparable inertial-based tracker on the market. |
| Embeddable | With the OEM version of 3DTracker being smaller than a cell phone SIM card, the sensor is able to be embedded within most HMDs or virtually any system |
| Flexible | A simple truth: different applications require different algorithms. With 3DSuit's focus on customer support 3DTracker can be modified to suit your specific needs. |

Technology in a Nutshell

Unlike optical and magnetic trackers that require the installation of specific infrastructure in the environment to operate, 3DTracker requires literally no added references. 3DTracker operates by measuring actual rotation rates and earth references of gravity and magnetic field. As such, it is able to track full 360deg rotations about all axes, can be used with literally no setup time, and can operate in a wide variety of locations both indoor and outdoor. Also with its utilization of gyroscopes for tracking fast movements, 3DTracker has virtually no latency for rotation rates up to 1,200 deg/sec.

Key Features

- Full 3DOF tracking w/ no infrastructure requirements
- Ability to track head movements with no perceivable latency
- Able to calibrate against magnetic interferences
- Built-in handling of problematic magnetic environments
- Full temperature compensated performance
- Board-level OEM versions available
- Natively supported in the WorldViz Vizard 4
- Provided with HID compliant drivers and full API
- Direct plug-in replacement for Intersense IC2 and IC3 sensors
- Both RS-485 and USB interfaces to PC supported

"It's nice to see 3DSuit pushing the cost-to-performance envelope in 3DOF trackers."

- Meir Machlin, CTO, Sensics
www.sensics.com

Technical Specifications

Sensors

Output Data	Quaternion + raw data, fixed point 16 bits
Update Rate	up to 500 Hz
Resolution	0.01 deg
RMS Accuracy	1 deg in yaw, 0.5 deg in pitch & roll
Operating Temperature Range	-40 to +70 C
Housing Seal Rating	IP-67 (submergible)
Power	5.6 Vdc, 80 mA
Weight	11 g
Size	45 mm x 16 mm x 9 mm

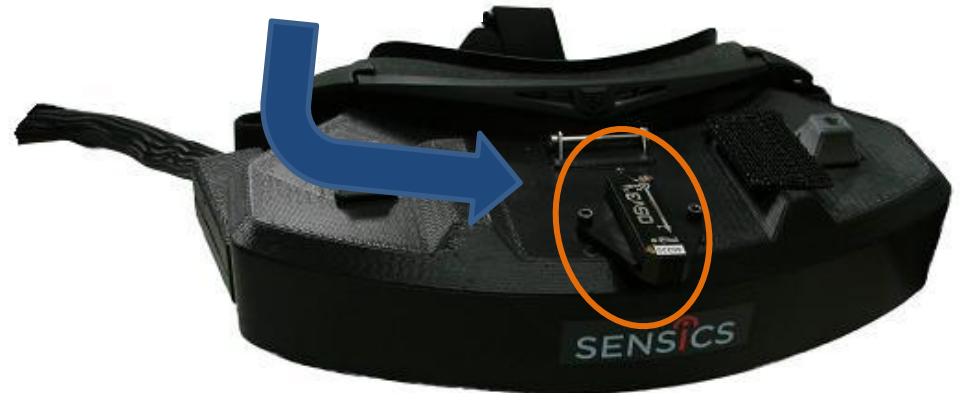
Communications

PC Interface	USB 2.0 (with supplied dongle) RS-485 @ 1Mbaud
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Power

Required Power	3.5 to 5Vdc, <300mW
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3DTracker mounted to the
Sensics xSight HMD



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