



- *Fast & Smooth*
- *Motion Prediction*
- *Immune to Interference*
- *Unlimited Range*

IS-300 Precision Motion Tracker

The world's fastest and smoothest head and hand orientation tracker.

Slow, jittery virtual environments are now a thing of the past. For the first time, high-fidelity tracking with all the ease-of-use, freedom and robustness inherent in sourceless inertial technology is now possible. Simulator performance and realism are greatly enhanced with the IS-300 from InterSense.

Jitter-Free.

The InterSense IS-300 tracker virtually eliminates the jitter common to other systems. This has been a major deficiency and source of simulator sickness in immersive head-mounted display applications.

Fast Response.

The InterSense IS-300 PRO offers industry leading update rates of up to 500 Hz, for the world's lowest latency tracking. Tracker-induced lag is removed from your virtual environment.

Distortion-Free.

Our patented inertial sensing technology is not susceptible to the electromagnetic interference you've come to expect from

competitive tracking technologies. So the InterSense IS-300 offers smooth, steady response, even in noisy, metal-cluttered environments.

Unlimited Range.

The IS-300 is completely sourceless. This means no setup, no line-of-sight constraints and virtually unlimited operating range. The signal processor is small enough to wear on a belt for tetherless application.

Motion Prediction.

The IS-300 PRO can predict motion up to 50 ms in the future, which compensates for graphics rendering delays and further contributes to eliminating simulator lag. InterSense is

the *only* company to employ the proven benefits of inertial angular rate and acceleration sensors to provide accurate feed-forward motion prediction.

No Slush or Drift.

InterSense's proprietary micro-machined inertial sensor unit and signal processing virtually eliminates the sloshy response common to inclinometers and the accumulation of drift error that plagues ordinary gyroscopes.

Software Compatibility.

If your application uses software that supports industry-standard trackers, you won't have to change a line of code to use the IS-300!

InterSense IS-300 Series

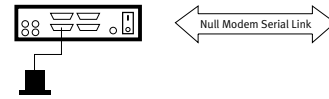
Technology Overview

The IS-300 obtains its primary motion sensing using a miniature solid-state integrated inertial instrument (InertiaCube™) which senses angular rate of rotation, gravity and earth components along three perpendicular axes.

The angular rates are integrated to obtain the orientation (yaw, pitch, and roll) of the sensor. Gravitometer and compass measurements are used to prevent the accumulation of gyroscopic drift.

Specifications

Degrees of Freedom Tracked	Yaw, pitch, and roll
Angular Range	All orientations
Maximum Angular Rate	1200°/sec
Angular Resolution	0.02° RMS
Static Accuracy	1° RMS
Dynamic Accuracy	3° RMS
Number of Sensors	IS-300 1 IS-300 PRO 4
Prediction	NA 0-50 ms
Maximum Update Rate	150 Hz 500 Hz
Interface Protocol	RS-232C with selectable baud rates to 115,200 Compatible with industry-standard protocol



Physical

Power	9-15 VDC, 8.6 W
Operating Temperature	0 to 50° C
Storage Temperature	-20 to 70° C
Dimensions	InertiaCube™ 1.06" x 1.34" x 1.2" Signal Processor 5.08" x 5.25" x 1.5"
Weight	2.1 oz. 15 oz.
Cable Length	10' extendible to 30' NA

Compatibility

The InterSense IS-300 is compatible with all industry leading software and hardware, including products from:

- **Virtual Research**
- **Superscape**
- **Sense8**
- **Division**
- **Multigen**
- **nVision**
- **Softimage**
- **Meta VR**
- **Kaiser Electro Optics**
- **Xtensory**
- **Thompson T & S**

More Information

Phone: 781-270-0090
Fax: 781-229-8995
e-mail: info@isense.com
Phone toll-free: 1-888-359-8478
Web: www.isense.com

InterSense Inc.
73 Second Avenue
Burlington, MA 01803