

InterSense InertiaCube²



Precision Orientation Reference System

- Inertial-based tracking from integration of nine sensing elements
- Sourceless tracking with full 360° range
- 180 Hz update rate with adjustable motion prediction
- Adjustable output filters and rotational sensitivity
- SDK for OEM applications on Windows, Linux and IRIX platforms
- Software libraries support up to four sensors simultaneously
- Windows software provides simple configuration, network interface and joystick emulation

The InertiaCube² is the world's smallest inertial orientation reference system. Providing full 360° sourceless tracking in all axes, the InertiaCube² integrates nine discrete, miniature sensing elements with advanced Kalman filtering algorithms. Its simple serial interface and support software provide a rapid development cycle for OEM applications.

Ideal for head tracking in simulation and training applications, the InertiaCube² is also being integrated in to systems for navigation of robotic & autonomous vehicles, 3D medical imaging, virtual & augmented reality, antenna & platform stabilization, location-based entertainment and attitude & heading reference systems.

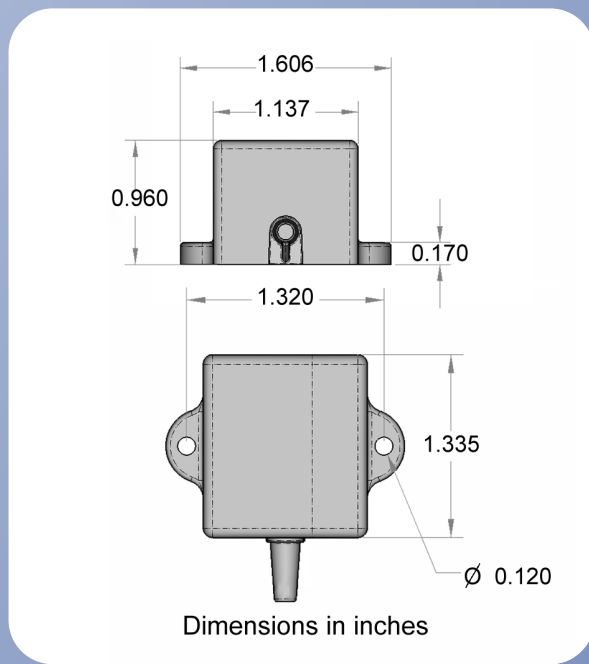
InertiaCube² Specifications

Degrees of Freedom	3 (Yaw, Pitch and Roll)
Angular Range	Full 360° - All Axes
Maximum Angular Rate*	1200° per second
Minimum Angular Rate*	0° per second
Accuracy*	1° RMS at 25°C
Angular Resolution*	0.01° RMS
Update Rate	180 Hz
Minimum Latency	2 milliseconds (host dependent)
Prediction	up to 50 milliseconds
Serial Rate	115.2 kbaud
Interface	RS-232 Serial
	Ethernet w/ Windows Control Software
Size	1.137 in x 0.960 in x 1.335 in (28.89 mm x 24.38 mm x 33.91 mm)
Weight	0.88 ounces (25.00 grams)
Cable Length	15 ft. (4.572 m) - Max. 75 ft (22.86 m)
Power	6 VDC, 100 milliamps via AC adapter
Operating Temperature Range	0° to 50° C
O/S Compatibility	.dll for Windows 98/2k/NT/XP/CE .so for Linux and SGI IRIX
Software Support	SDK with full InterSense API Windows Control & Connectivity Software

*Measurements with enhancement filter = 0 (off)

InterSense, Inc. • 1 North Ave. • Burlington, MA 01803

781-270-0090 • FAX 781-229-8995 • info@isense.com



 **INTERSENSE**
www.isense.com