

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, IRIX and Macintosh OS X platforms
- Software libraries support up to four sensors simultaneously
- Windows software provides simple configuration, network interface and joystick emulation
- CE compliant and UL approved

The InertiaCube2 integrates nine discrete, miniature sensing elements with advanced Kalman filtering algorithms producing a full 360°, precision, sourceless orientation tracking system. Its simple serial or USB interface with support software provides a rapid development cycle for OEM applications.

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

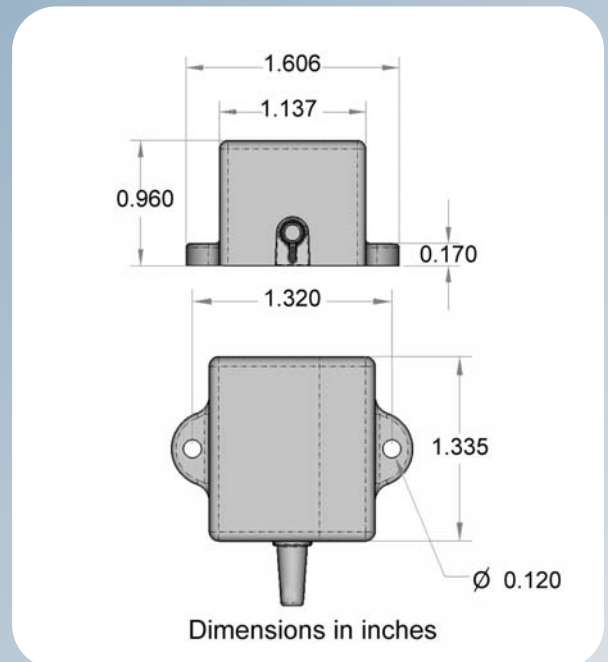
InertiaCube2 Specifications

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
Serial Interface Update Rate	180 Hz
Minimum Latency	2 ms for RS-232 (PC host OS dependent)
Prediction	up to 50 milliseconds
Serial Rate	115.2 kbaud
Interface	RS-232 Serial (shown above)
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 libisense.dylib for Mac OS X
Software Support	SDK with full InterSense API Windows Control & Connectivity Software Ethernet w/ Windows Control Software

*Measurements with perceptual enhancement algorithm turned off (= 0)

Optional USB Adapter Specifications

InterSense USB Update Rate	Windows 98/2000 up to 150 Hz Windows XP 70 Hz Macintosh OS X 40 Hz
USB Interface Minimum Latency	4 ms for USB direct (PC host OS dependent)
Power Source	Direct from Host USB Port
USB Adapter Size	2.36 in x 1.38 in x 0.79 in (60 mm x 35 mm x 20 mm)
Cable Length	9.84 feet (3 meters)



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 **INTERSENSE**
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