

Wireless Motion Sensor

Compact, Portable Technology for Kinematics

The GLNT wireless motion package integrates accelerometers and gyroscopes with Bluetooth® technology to capture three-dimensional motion during unconstrained activity. Kinematic data can be streamed wirelessly in real-time or stored in memory and later downloaded. An inductive pad is used for wireless charging. A software application provides an interface for quickly connecting up to four motion sensors and streaming data to a PC. In addition, software development kits are available for custom software development in applications such as MATLAB®, LabVIEW™, and other Windows-based environments.

Wireless Motion Sensor Unit Specifications

Sensor	Angular Velocity	Acceleration
Sensor type	MEMS gyroscope	MEMS accelerometer
Number of channels	3 orthogonal channels	3 orthogonal channels
Range	± 2000 deg/sec	± 5 g
Accuracy	$\pm 4\%$ of measurement	$\pm 2\%$ of measurement
Resolution	1 deg/sec	2 mg
Noise	.5 deg RMS	1.5 mg RMS
Sampling rate	64 samples per second	
Bluetooth	Class 2 device, Bluetooth 2.0	
Battery life	8 hours logging (3 hours streaming)	
Recharge time	1 hour 90%; 3 hours 100%	
Memory	16 MB (8 hours)	
Dimensions (L x W x H)	1.28 x 0.81 x 0.60 inches	
Weight	0.30 ounces	



Sensor Software Options

glneurotech.com/motion-sensor-software/

GLNT Motion Capture Software

The motion sensor comes with data collection software integrating simple tools for data collection. The software allows a user to search for sensors, connect via Bluetooth, stream, and save data for up to 4 sensors. Data is saved in ASCII format for import into third party analysis packages.

Software Development Kit

The software development kit, available for FREE download, allows for customer software development including displays and analysis written in applications such as MATLAB®, LabVIEW™ and other Windows-based development environments. The package includes the APIs as well as example code written in both MATLAB and LabVIEW to get developers up and running quickly.

