WIRELESS VERSATILITY

G4™ is the compact, tetherless tracker that allows for uninhibited movement. Harnessing the powerful performance of A/C electromagnetics, G4 delivers high-quality, real-time 6DOF data without the post analysis complications of hybrid technologies.

HOW IT WORKS
Sensor data calculations are transmitted directly to the PC via Radio Frequency (RF) links, providing a seamless stream of drift-free data. Sensors within the tracking range provide full position and orientation data.

EXPAND & EVOLVE
Each G4 hub can track up to three sensors, with an update rate of 120Hz each. Track additional objects or people by increasing the number of hubs; expand the tracking range by adding additional sources.

FEATURES
- Wireless RF Communication
- Set Up & Track in Minutes
- No Line-of-Sight Occlusions
- 10+ Hours of Battery Life
- Scalable
- Zero Drift
- Compact Size
- Ultra-Portable

APPLICATIONS
G4 paves the way for cutting-edge solutions and advancement in the areas of training and simulation, rehabilitation, physical therapy, biomechanics, sports analysis, and virtual or augmented reality.

(left) Lightweight and portable G4 Hub
## COMPONENTS

The standard G4 system includes an SEU (System Electronics Unit), or hub, one standard sensor, one source and one RF/USB module. You can easily expand the system's capability by adding hardware components.

### SYSTEM ELECTRONICS UNIT
Embedded hardware and software computes the position and orientation of each sensor and wirelessly transmits data.

- **WEIGHT:** 4 oz (114 g)
- **DIMENSIONS:** 4.2 in (10.6 cm) x 0.75 in (1.9 cm) x 2.6 in (6.6 cm)

### STANDARD SENSOR
A small lightweight cube, the sensor’s position and orientation is precisely measured as it is moved.

- **WEIGHT:** 0.32 oz (9.1 g)
- **DIMENSIONS:** .9 in (2.29 cm) x 1.11 in (2.82 cm) x .6 in (1.52 cm)

### SOURCE
The source generates the magnetic field in which the sensor is tracked.

- **WEIGHT:** 1.60 lb (726 g)
- **DIMENSIONS:** 4.07 in (10.34 cm) x 4.05 in (10.29 cm) x 4.07 in (10.34 cm)

Dimensions and weight are approximate. Dimensional drawings available upon request.

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>UPDATE RATE</th>
<th>INTERFACE</th>
<th>LATENCY</th>
<th>STATIC ACCURACY</th>
<th>SOFTWARE TOOLS</th>
<th>SYNC INPUT</th>
<th>OPERATING TEMPERATURE</th>
<th>POWER REQUIREMENTS</th>
<th>REGULATORY</th>
</tr>
</thead>
</table>
| 120Hz per sensor, simultaneous sampling | Proprietary RF link; 2.4 GHz frequency-hopping architecture; USB | Less than 10 milliseconds in optimal RF communications conditions | 1 meter (3.3 ft): 0.50 degrees RMS - 0.08 inches/.20 cm RMS
2 meter (6.5 ft): 0.75 degrees RMS - 0.25 inches/.64 cm RMS
3 meter (9.8 ft): 1.00 degrees RMS - 0.50 inches/1.27 cm RMS | PMgr GUI for Microsoft Windows®
Setup and Configuration Utilities for Microsoft Windows® and Linux®
PDI SDK for Microsoft Windows®
C Programming APIs for Microsoft Windows® and Linux® | Up to 8 discrete digital inputs for event triggers | 10°C to 40°C at a relative humidity of 10% to 95%, noncondensing | Source: 5 volt, 1 amp/hub: 5 volt, 500 ma/RF dongle: 5 volt, 30 ma Internal battery, rechargeable via USB or included power supply | FCC Part 15, Class B
2.4 GHz Radio Approval:
FCC Part 15
IC RSS 210 | EN61326-1: 2013 Emissions
EN61326-1: 2013 Immunity,
Basic Environment
EN 301489-1 V1.9.2 2011 Emissions
EN 301489-3 V1.6.1 2011 Immunity,
Basic Environment |

## RANGE VS RESOLUTION (WITH RX2)

<table>
<thead>
<tr>
<th>Range (inches)</th>
<th>Position Resolution (inches)</th>
<th>Orientation Resolution (degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.0</td>
<td>0.0003</td>
<td>0.0008</td>
</tr>
<tr>
<td>24.0</td>
<td>0.0010</td>
<td>0.0020</td>
</tr>
<tr>
<td>48.0</td>
<td>0.0080</td>
<td>0.013</td>
</tr>
<tr>
<td>96.0</td>
<td>0.0610</td>
<td>0.100</td>
</tr>
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</table>

## GET IN TOUCH

Our technology powers applications in a wide variety of markets, catering to healthcare, military, and in countless research areas. Talk with our Motion Tracking Experts today.

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*Large metallic objects, such as desks or cabinets, located near the source or sensor, may adversely affect the performance of the system.*

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