FASTRAK® is the workhorse of the industry and set the standard for all other trackers. Using A/C electromagnetic technology, FASTRAK delivers accurate position and orientation data, with virtually no latency.

**HOW IT WORKS**
With a single magnetic source, FASTRAK delivers data for up to four sensors. The source emits an electromagnetic field, sensors within the field of range are tracked in full 6DOF (6 Degrees-Of-Freedom). Set-up is simple and intuitive, with no user calibration required. Due to the nature of the technology, there is no need for a line-of-sight for continuous tracking.

**TWO SOLUTIONS IN ONE**
FASTRAK is a 3D Digitizer and a quad sensor motion tracking solution. Simply add an optional digitizing stylus for one of the most highly accurate and easy-to-use digitizers on the market. FASTRAK is trusted around the world for its reliability and repeatable results; it sports an ultra-low latency, at 4 milliseconds.

**FEATURES**
- Real-Time Data
- Up to Four Sensors
- Virtually No Latency
- No Line-Of-Sight Occlusions
- Fully Embeddable Sensors
- Zero Drift
- Simple Set-Up
- Reliable, Proven Technology
COMPONENTS

The FASTRAK® system includes an SEU (Systems Electronics Unit), standard sensor, and a 2-inch source. You can easily expand the system’s tracking capabilities by adding up to three sensors. Expand the tracking range by upgrading to a larger source.

SYSTEM ELECTRONICS UNIT
Contains the hardware and software necessary to generate and sense the magnetic fields, compute position and orientation, and interface with the host computer via USB, RS-232 or optional RS-422.

DIMENSIONS: 10.2 in (25.9 cm) x 11.5 in (29.2 cm) x 2.3 in (5.8 cm)

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

STANDARD SENSOR
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.

TX2 - WEIGHT: 8.8 oz (250 g) DIMENSIONS: 2.3 in (5.84 cm) x 2.2 in (5.08 cm) x 2.3 in (5.84 cm)

TX4 - WEIGHT: 1.60 lbs (726 g) DIMENSIONS: 4.07 in (10.33 cm) x 4.07 in (10.33 cm) x 4.04 in (10.16 cm)

TX1 - WEIGHT: 0.36 oz (10.2 g) DIMENSIONS: .9 in (2.29 cm) x 1.11 in (2.82 cm) x .6 in (1.52 cm)

SPECIFICATIONS

<table>
<thead>
<tr>
<th>UPDATE RATE</th>
<th>120 updates/second divided by the number of sensors</th>
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</thead>
<tbody>
<tr>
<td>INTERFACE</td>
<td>USB; RS-232 with selectable baud rates up to 115.2 K (optional RS-422)</td>
</tr>
<tr>
<td>LATENCY</td>
<td>4 milliseconds</td>
</tr>
<tr>
<td>STATIC ACCURACY</td>
<td>0.03 inches RMS for the X, Y, or Z position; 0.15º RMS for sensor orientation. The system will provide the specified performance when the sensors are within 30 inches of the source. Operation over a range of up to 10 feet is possible with slightly reduced performance.</td>
</tr>
<tr>
<td>OPERATING TEMPERATURE</td>
<td>10ºC to 40ºC at a relative humidity of 10% to 95%, noncondensing</td>
</tr>
<tr>
<td>POWER REQUIREMENTS</td>
<td>15 W, 100-240 VAC, 47-63Hz</td>
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<tr>
<td>SOFTWARE TOOLS</td>
<td>GUI included</td>
</tr>
<tr>
<td></td>
<td>USB drivers for Microsoft Windows*</td>
</tr>
<tr>
<td></td>
<td>Linux® - contact Polhemus</td>
</tr>
<tr>
<td>REGULATORY</td>
<td>FCC Part 15, class A</td>
</tr>
<tr>
<td></td>
<td>EN61326-1:2013 Emission</td>
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<tr>
<td></td>
<td>EN61326-1:2013 Immunity, Basic Environment</td>
</tr>
</tbody>
</table>

RANGE VS RESOLUTION

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.

POLHEMUS.COM

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