

LIBERTY LATUS

THE TOP CHOICE FOR WIRELESS, LARGE AREA TRACKING

INDUSTRY STANDARD

LATUS (Large Area Tracking Untethered System), was named for what it does best. If you require large area coverage, without any tethers or wires in your tracking environment, LATUS is the perfect 6DOF solution for tracking areas up to hundreds of square feet.



HOW IT WORKS

LIBERTY LATUS utilizes self contained, embeddable markers that are tracked by receptors. Markers can be placed anywhere on the body or an object. Receptors are placed in the desired range to be covered. The system comes standard with a GUI and a comprehensive easy-to-use SDK (Software Developers Kit) with built-in features ideal for multiple applications and users.

SCALABLE

The base product comes standard with one marker and one receptor, equipped with four receptor channels. Additional markers can easily be added to increase the number of objects being tracked, for up to 12 markers total. Each receptor covers approximately 8+ feet (2.44 m) in diameter. The system is upgradeable to 8, 12, or 16 receptor channels to increase the area of tracking coverage.

FEATURES

- ✓ Completely Wireless
- ✓ Fully Embeddable Markers
- ✓ Large Area Tracking Coverage
- ✓ No Line-of-Sight Occlusions
- ✓ Zero Drift
- ✓ Rechargeable, Lithium Battery
- ✓ Full 6DOF Tracking
- ✓ Multiple Applications & Users

OPTIONS



Additional Marker



Additional Receptors



Marker Size

COMPONENTS

The LIBERTY LATUS system includes an SEU (Systems Electronics Unit), one marker, and one receptor. A single high-capacity battery charger is included with each marker. Add additional markers easily, and ask about how to upgrade to expand the coverage area.

SYSTEM ELECTRONICS UNIT

The SEU contains the hardware and software necessary to sense the magnetic fields generated by the markers, compute position and orientation, and interface with the host computer via RS-232 or USB.

240/8:
12.2 in. (31 cm) x 7 in. (17.8 cm) x 8.5 in. (21.6 cm)

240/16:
12.2 in. (31 cm) x 7 in. (17.8 cm) x 11 in. (27.94 cm)

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

WIRELESS MARKER

Marker weighs 2.8 ounces and can easily attach to the body or object, as needed.

WEIGHT: 2.8 ounces (79.4 g)
DIMENSIONS: 3.50 in (8.89 cm) x 1.66 in (4.22 cm) x .97 in (2.46 cm)

RECEPTOR

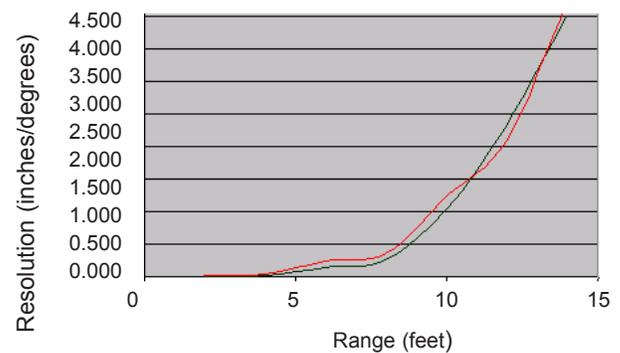
Lightweight, small cube can be easily mounted to almost any surface.

WEIGHT: 3.2 ounces (90.7g)
DIMENSIONS: 2.45 in (6.22 cm) x 1.45 in (3.68 cm) x 1.44 in (3.66 cm)

SPECIFICATIONS

UPDATE RATE	188Hz/marker for one to eight markers 94Hz/marker for nine to twelve markers
INTERFACE	USB; RS-232 to 115,200 Baud rate; both are standard
LATENCY	Approximately 5 milliseconds
STATIC ACCURACY	0.5 degree and 0.1 inch (0.254 cm) using one marker and one receptor at 30 inches (76.2 cm). Accuracy is installation dependent, typical accuracy may normally result in 1 to 3 degrees and 1 to 3 inches (2.54 cm to 7.62 cm).
OPERATING TEMPERATURE	0°C to 50°C at a relative humidity of 10% to 95%, noncondensing
POWER REQUIREMENTS	100-240 VAC, 50-60Hz, single phase, 50W
SOFTWARE TOOLS	GUI and SDK included. USB driver package for Microsoft Windows®
REGULATORY	FCC Part 15, class A EN61326-1:2013 Emissions EN61326-1:2013 Immunity, Basic Environment

RANGE VS RESOLUTION



— ORIENTATION — POSITION

Marker-Receptor Range (feet)	Position Resolution (inches)	Orientation Resolution (degrees)
2	0.005	0.020
4	0.015	0.046
6	0.144	0.248
8	0.262	0.355
10	1.052	1.239
12	2.347	2.106
14	4.027	4.235

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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