

Guide your drone to a precision landing in any environment, from total darkness to direct sunlight.

The Sixdof sensor unit locks onto a uniquely coded beacon for centimeter-level accuracy on a stationary platform or moving deck, without relying on GPS.





Outperforming **QR Code** Solutions:

- Struggle to work when there are shadows
- Require significant on-drone processing overhead
- Have difficulty operating unless the drone is in stable, vibration-free flight
- Cannot work at night without cumbersome backlighting

Outperforming Standard Beacons:

- Function poorly under a long list of challenging conditions
- Do not scale to allow multiple landing pads at a single site
- Cannot provide full 6DOF, or even pitch and yaw reading for a safe landing

Drone Landing Guidance for the Last 100+ Meters

Sixdof's unique technology, the result of over six years of R&D, is based on our patented Aspheric Toroid Compression Lens. The Sixdof technology provides the platform for a perfect landing guidance solution:



Provides Positional, Directional and Pose information, even in sunlight and shadow



Works in GPS denied areas



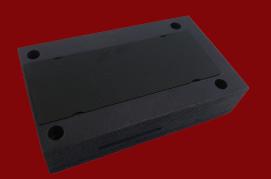
Provides orientation (full 6dof)



Lands on a moving or stationary target



Has no camera, ideal in restricted areas



SENSOR MODULE INSTALLATION	The sensor unit is installed on the drone in a position providing field of view to landing beacons on the ground.
BEACON INSTALLATION	The beacons are on the ground or a moving target, aimed upward. For full 6dof tracking, the beacons would include one high powered beacon and 4 lower powered beacons. Each beacon has a unique code.
FIELD OF VIEW	The sensor has a 120-degree field of view. Line of sight between sensor and beacon is required.
RANGE	Tested up to 100m in full sunlight.
ALGORITHM SOFTWARE	Lightweight, can run on a companion computer as small as a Raspberry Pi 3b.
PRIVACY	System is not a camera and only captures the coded infrared light sources.
HIGH SPEED	Tracking speeds up to 400 Hz
WEIGHT	Sensor board weight 30 grams
POWER	Sensor Board – 5v USB (200mA = 1.75W) Beacons – 24v (1 amp)
HARDWARE INTERFACE	UDP RJ45 Connection between sensor board and companion computer.
SOFTWARE INTERFACE	SDK and API available for data interface.

DevKit available for \$2,500 + freight

Includes: Sensor unit, 1 high-powered beacon, 4 low-powered beacons, SDK and API for software integration, up to 10 hours remote support.

www.sixdofspace.com sales@sixdofspace.com