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

### DevKit available for \$2,500 + freight

Includes: Sensor unit, 1 high-powered 20m beacon, 4 low-powered beacons, SDK and API for software integration, up to 10 hours remote support. Visit our website for more information.

[www.sixdofspace.com](http://www.sixdofspace.com)  
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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.



## Drone Landing Guidance for the Last 25-100 Meters

### 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

Sixdof's unique technology, the result of over seven 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-limited areas



Provides orientation (full 6dof)



Track a moving or stationary target



Has no camera, ideal in restricted areas

