

Smart Tethered Drone Follower

Technology Overview

Tethered drones are sometimes mounted on moving vehicles for mobile applications. The existing technologies that enable these drones to follow their vehicles are GPS, visual markers or radio frequency beacons. However, these technologies requires GPS availability or proximity to the sensors. Our solution aims to overcome these limitations by using a method that depends only on the tether cable angle.

Features & Specifications

This technology consists of a cable angle measurement unit that calculates the direction and motion of the tether cable attached to the drone. When the vehicle moves, the tether cable will be pulled to a new orientation, which is continuously captured and processed. A flight processing unit then commands the drone to fly automatically to follow the vehicle.



Customer Benefits

This technology can work in a GPS-denied locations, low visibility and noisy network environment, in which the tethered drone will autonomously follow its attached vehicle.

Potential Applications

- This system can be applied in the security industry where the drone is attached to a moving vehicle or vessel as an elevated camera platform.
- For infrastructure inspection, this technology will enable a tethered drone to follow its attached vehicle to capture images on the move.