Aerial Surveillance with UAVs

Mapping small areas with full-size aircraft is both expensive and impractical. Micro-drone unmanned aerial vehicles (UAVs) are designed to survey small areas and provide geo-referenced, high-resolution imagery from low altitude.

THE Applus+ SOLUTION

Applus+ has significant experience in UAV projects, and we can offer professional-grade aerial-surveillance services.

We are able to map areas of up to thousands of hectares on request, and our equipment and personnel can be transported anywhere in the world and be fully operational at short notice.

The micro-drone UAV systems that we utilise are some of the quietest multi-rotor platforms in the world, making them perfect for stealthy and silent surveillance missions. They are pre-programmed to follow GPS-guided flight paths to automatically capture the required imagery (including the necessary overlap and height requirements). The data from each flight is recorded, making it possible to repeat the same flight at regular intervals to create time-lapse photography. Combine all of this with industry-leading flight times and the ability to have multiple payloads such as night vision, thermal imaging and long-range high-definition zoom cameras, and it is clear that Applus+ can provide the necessary equipment for most surveillance operations.

Applus+ can also offer bespoke UAV solutions such as ground-based tethering systems that allow a drone to hover for 24 hours a day without the need to land. We also utilise encrypted digital-video downlinks for added privacy and security.

Our UAV systems are fully autonomous with advanced waypoint mission capabilities that can be activated 24 hours a day with or without human involvement.

Target customers

Aerial-surveillance techniques have a wide variety of possible applications, which include, but are not limited to, the following:

- Pipeline security patrols
- Prison security
- Wildlife protection
- Search and rescue operations
- Oil spill and clean-up operations
- Major event security
- Law enforcement applications/support