

Aerial Power Line Inspection | Buho System

From the Department of Advanced Aerial Inspection Techniques, we provide different solutions for carrying out regulatory or preventive aerial power lines inspections (medium and high voltage power lines inspection) that involve the use of data capture equipment such as:

- Gyro-stabilized platforms
- High-resolution aerial cameras
- [LiDAR capture equipment](#)

With this equipment we can carry out a visual inspection (aerial cameras of up to 150 mpx and HD video); thermographic inspection; ultraviolet inspection, LIDAR distance measurement, and [3D modeling](#) to obtain a digital twin or an aerial topography. Our overhead power line inspection services aim to verify the integrity of operational power lines through a combination of the aforementioned aerial power inspection techniques. It is a fully customizable service that can be easily adapted to any customer inspection plan. This service incorporates a review of existing inspection plans to propose new scopes and improvements and our equipment can be used by helicopter or drone.



THE Applus+ SOLUTION

An aerial power line inspection allows us to make a quick but detailed analysis of transmission and distribution power lines and their accessories so that we can meet the needs of our customers and reduce costs. We carry out all kinds of individual or combined inspections depending on the needs of our clients. We also have our own post-processing laboratory that allows us to streamline the inspection process and offer a better response rate. In addition, within Project Halcon, we have developed our own applications to process and analyse the overhead power line inspection data, using artificial intelligence. We also have state-of-the-art stations to analyse and record



possible anomalies. The types of inspections we carry out include visual inspections, thermographic inspections, ultraviolet inspections, and distance inspections using LiDAR. Applus+ professionals are characterized by their high qualifications and experience that respond to the most demanding market requirements.

Target customers

This service is aimed at all those companies that operate and maintain high and medium-voltage lines, specifically operators of electrical transmission and distribution systems. As well as evacuation, power lines from solar or wind farms, and those providing to large industries, etc.

Key customer benefits

Our power line inspection services offer the following advantages to customers:

- Consistency of approach, with the same team inspecting all areas of the electric company.
- Cost savings by grouping various types of inspection in the same flight (thermographic, visual, LIDAR distances, UV, etc.).
- Flight time optimization when using high-resolution cameras.
- Reduced inspection times compared to ground patrols.
- Full aerial power line inspection reports.