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Solar Panel Drone Inspection

UAVs can inspect solar panels quickly and efficiently, reducing downtime and enabling real-time assessments.

Elevate your renewable energy asset management with our specialized UAV inspection services for wind turbines and solar panels. Designed for safety, efficiency, and accuracy, our drone technology provides comprehensive inspections that drive operational excellence.

THE Applus+ SOLUTION

Maintaining renewable energy assets like solar panels is crucial for optimal performance, and our drone inspection services offer a cutting-edge solution for this.

Equipped with advanced sensors, thermal imaging sensors, high-resolution cameras, or LiDAR, our drones can perform detailed solar panels and associated infrastructure.

This enables early detection of wear and tear, defects, or any other issues that could affect performance.

The UAVs can quickly cover large solar plants providing accurate and actionable data. This data can be easily integrated into existing asset management systems for real-time monitoring, aiding in predictive maintenance, operational planning, and performance optimization.

Solar panel drone inspections are carried out by Enertis Applus+, our solar services and energy storage solutions specialist, who has developed the Smart PV Inspection Tool to accelerate defect identification processes and increase accuracy by using a combination of infrared (IR) thermography on solar panels carried out with drones and Artificial Intelligence models.

Target customers

Our UAV technologies for solar panel are ideal for energy providers, renewable energy asset managers, and governmental agencies focused on sustainable and tailored energy solutions, as well as looking to improve the reliability and efficiency of their installations.

Key customer benefits

UAV inspection services for solar park inspection offer several advantages:

- Safety is significantly enhanced by reducing the need for manual inspections eliminating the need for personnel to climb turbines or access rooftops or challenging terrain where solar panels may be installed, reducing the risk of accidents.
- Operational efficiency is improved through quicker, yet thorough, inspections that enable predictive maintenance.
- The high-quality data collected is both accurate and actionable, facilitating better decision-making and optimized operational planning.
- Detail reports are valuable for making decisions about maintenance, repairs, and infrastructure upgrades, as well as helping operators identify underperforming panels.