

Solar-powered containerized type for drone stations connected to the grid





Overview

The introduction of Unmanned Aerial Vehicles (UAVs) in smart city operations is considered a sustainable technological solution due to the promised significant greenhouse gas emission reductions. This study.

What is a drone charging system & how does it work?

The system allows the UAV to automatically dock and charge without manual intervention. A fixed positioning and charging system for vehicle-mounted drones on commercial vehicles that allows autonomous drones to land, dock, charge and store on moving vehicles.

How do drones work?

The drones can autonomously dock, charge, and transfer power wirelessly to the stations. They can also form groups to coordinate tasks and share functions. The stations have imaging sensors to guide drone docking. The drones have docking ports to connect to the stations. This allows continuous drone flight with in-air docking and charging.

What is a vehicle-mounted drone?

A fixed positioning and charging system for vehicle-mounted drones on commercial vehicles that allows autonomous drones to land, dock, charge and store on moving vehicles. The system consists of a drone, a docking station with a charging platform, and a storage compartment. The drone has a laser radar and camera for scene recognition.

How do autonomous drones work?

Autonomous drone operations using docking stations integrated into clothing, helmets, vehicles, etc. The drones can autonomously dock, charge, and transfer power wirelessly to the stations. They can also form groups to coordinate tasks and share functions. The stations have imaging sensors to guide drone docking.



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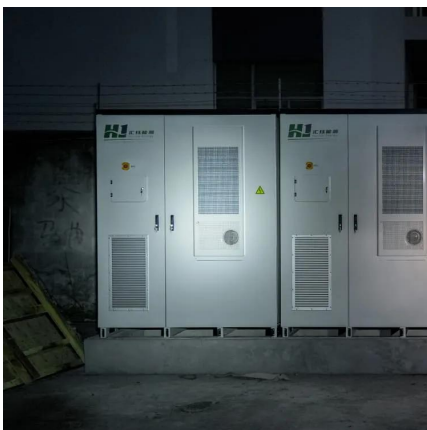
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These stations feature solar panels that convert sunlight into electricity, which is then used to charge the drone's batteries. Solar-powered charging docks are eco-friendly and sustainable, ...



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