Reducing the charging time of eVTOL: Implementing Battery Management System for fast charging

Overview

The promising future of eVTOLs is limited by the long charging time of their batteries. This reduces passenger throughput as the number of trips that it can take will be reduced, and it also decreases the efficiency of the operation. Currently, technologies are producing fast charging, but this method dissipates heat, which would degrade the battery.

Battery management systems (BMS) act like smart chargers, monitoring battery health and adjusting charging parameters to optimize lifespan. Additionally, thermal management systems are crucial for controlling temperature during charging and discharge. This ensures battery safety and allows for more efficient power delivery during flight. These innovations are paving the way for faster charging times and a more robust eVTOL experience.

Features

- Adaptive charging algorithms
- Advanced thermal management systems
- Effective power delivery to the propulsion system

