



ŁOTWA SYSTEM

Cut off the base station battery





Overview

How does a battery group work in a base station?

The equipment in base stations is usually supported by the utility grid, where the battery group is installed as the backup power. In case that the utility grid interrupts, the battery discharges to support the communication switching equipment during the period of the power outage.

How many battery groups does a base station have?

The original battery allocation result is largely skewed that over 65 percent base stations are equipped with only one battery group. Our framework considers both the base station situations and battery features, allocating 2 battery groups to most base stations and 3 or 4 battery groups to those with long-time power outages.

How long do base station batteries last?

After using BatAlloc to allocate suitable numbers of battery groups for base stations, the average battery lifetime has achieved to 4.3 years, roughly 1.8 times longer than that of the original allocation. The results indicate that our framework can also better protect base station batteries and significantly prolong their average lifetimes.

What happens if a battery group is mismatched?

The mismatch can lead to serious problems in base stations. First, due to the limited numbers and capacities of backup battery groups, long time power outages can result in service interruptions in many base stations.



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Main Causes of Shortened Battery Lifespan in Base Stations

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Optimal Backup Power Allocation for 5G Base Stations

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Battery discharge current limit for communication base ...

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Backup Battery Analysis and Allocation against Power ...

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Analysis of the application of LiFePO4 battery in base station

LiFePO4 battery is the safest high specificenergy battery in the field of lithium ion batteries. The discharge voltage of LiFePO4battery is very stable, generally 3.2V. The voltage after the ...

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Jan 17, 2022 · Battery groups are installed as backup power in most of the base stations in case of power outages due to severe weathers or human-driven accidents, particularly in remote ...

Communication Base Station Battery Disposal , HuiJue Group ...

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