



WALMER ENERGY

Base station power shortage





Overview

How to reduce the energy consumption of a base station?

So when the inter-cell distance is too large, it is necessary to increase the distance between cells, thus reducing the power consumption of the base station. In the actual network, in order to reduce the energy loss caused by frequent switching, the following two methods can usually be used: increase the distance between cells.

Why are there so many power shortages?

There are two main reasons for the power shortages (Chen et al., 2022). One is a supply and demand imbalance. For example, rising coal prices have led to a substantial increase in the cost of thermal power generation, and coupled with the control of electricity prices, power producers are less willing to generate electricity.

Why does a base station lose a lot of power?

Because switching is a continuous process and the base station is a device that works periodically, the switching loss accounts for a large proportion of the total power consumption of the base station.

How does power shortage affect R&D?

The adverse effect of power shortage on R&D will undermine firms' long-term performance and thus should be highlighted alongside its adverse effect on productivity. This negative externality suggests that more effort should be made to mitigate power shortages, which can be implemented in several ways.



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