

Base station backup power supply parameters

Why do base stations have a small backup energy storage time?

Base stations' backup energy storage time is often related to the reliability of power supply between power grids. For areas with high power supply reliability, the backup energy storage time of base stations can be set smaller.

What is the relationship between power supply reliability and backup time?

According to the inverse relationship between the power supply reliability of the distribution network and the backup time of the base station, the traditional base station energy storage model is modified to obtain a base station energy storage model that is affected by power supply reliability and base station communication volume.

How to determine backup energy storage capacity of base stations?

For the determination of the backup energy storage capacity of base stations in different regions, this paper mainly considers three factors: power supply reliability of the grid node where the base station is located (grid node vulnerability), the load level of the grid node and communication load.

Can base station energy storage participate in emergency power supply?

Based on the established energy storage capacity model, this paper establishes a strategy for using base station energy storage to participate in emergency power supply in distribution network fault areas.

Is backup energy storage time a constant?

In the research, relevant scholars often regard the backup energy storage time of the base station as a constant [22,23], and only consider the variability of the base station power consumption. Base stations' backup energy storage time is often related to the reliability of power supply between power grids.

Does a base station energy storage model improve the utilization rate?

Where traffic is high, less base station energy storage capacity is available. Compared with the fixed backup time, the base station energy storage model proposed in this article not only improves the utilization rate of base station energy storage, but also reduces the power loss load and power loss cost in the distribution network fault area.

Cellular base stations (BSs) are equipped with backup batteries to obtain the uninterruptible power supply (UPS) and maintain the power supply reliability. While maintaining the reliability, ...

Web: <https://edukacja-aktywna.pl>

