

ContainerPower Energy Solutions

Service life of energy storage power supply for communication base stations



Overview

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 can a base station save energy?

Energy saving is achieved by adjusting the communication volume of the base station and responding to the needs of the power grid to increase or decrease the charge and discharge of the base station's energy storage. However, the paper's pricing of energy interaction ignores the operating loss costs of the operator's energy storage equipment.

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.

What is a base station energy storage capacity model?

Based on the base station energy storage capacity model established in contribution (1), an objective function is established to minimize the system operating cost in the fault area, and the base station energy storage owned by mobile operators is used as an emergency power source to participate in power supply restoration.

Service life of energy storage power supply for communication base

Contact Us

For catalog requests, pricing, or partnerships, please visit:
<https://websparafotografos.es>