

SolarInnovate Energy Solutions

Communication base station flow battery operation



Overview

How many batteries does a communication base station use?

Each communication base station uses a set of 200Ah·48V batteries. The initial capacity residual coefficient of the standby battery is 0.7, and the discharge depth is 0.3. When the mains power input is interrupted, the backup battery is used to ensure the uninterrupted operation of communication devices.

Why do cellular base stations have backup batteries?

[.] 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, the backup batteries of 5G BSs have some spare capacity over time due to the traffic-sensitive characteristic of 5G BS electricity load.

When does a base station need a backup battery?

When the power supply of the grid is good or the base station load is in a state of low energy consumption, the backup battery of the base station is usually idle. Reasonable evaluation of the reserve energy required by the base station is the premise of its response to the grid dispatching.

What is a scheduling strategy reserve battery?

The scheduling strategy reserve battery is considered when the communication traffic changes, and base station backup battery model participating in power grid scheduling is established, which solves the problem of dynamic change of base station reserve demand.

How does the power load of a 5G base station affect communication load?

Therefore, the variation of the power load of the 5G base station is closely related to the communication load. It is divided into two kinds of structure, the one that doesn't change is the first structure, such as lighting and air

conditioning load; due to the communication load. The second structure of the power load is proportional to the flow.

What is base station energy storage battery schedulable capacity?

Base station energy storage battery schedulable capacity Spare battery capacity is divided into two types, which vary with load. The first type is the reserve capacity reserved to maintain availability. The second type is the schedulable capacity that can be transmitted to the grid.

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