

Base station room energy management system is the guarantee





Overview

What are the standardized energy-saving metrics for a base station?

(1) Energy-saving reward: after choosing a shallower sleep strategy for a base station, the system may save more energy if a deeper sleep mode can be chosen, and in this paper, the standardized energy-saving metrics are defined as (18) $R_{ie} = E_{SM} - 0 E_{SM} = i E_{SM} - 0 E_{SM} = 3$.

What is base station dormancy?

In response to the problem of high network energy consumption caused by the dense deployment of SBS, the base station dormancy technique is seen as an effective solution, as it does not require changes to the current network architecture and is relatively simple to implement. This technique was first proposed in the IEEE 802.11b protocol .

How many base stations are in a heterogeneous network?

As an example, one can mention the transition from homogeneous networks (comprising 1 to 3 base stations (BSs) per km²) to heterogeneous networks (comprising 10 to 100 nodes per km²). Furthermore, the growing need for larger storage capacities adds to energy requirements.

What is threshold-based base station sleep strategy?

Threshold-based base station sleep strategy is a common base station management method in wireless communication networks, which adjusts the operating state of the base station to save energy and improve resource utilization by dynamically setting appropriate thresholds.



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