

Battery Energy Saving for Outdoor Base Stations





Overview

In order to extend the life span of standby battery for outdoor base station, a semiconductor thermoelectric device/phase change materials (PCMs) coupled battery thermal management system (BTMS), a.

What is the sleep mode of a base station?

There are different stages of the sleep mode of base stations. These are mentioned below: On: the small cell operates fully and consumes the maximal power. Standby: the small cell sleeps in “light” mode and can easily wake up on UE’s request., This can be done by shutting down the TCXO heater and RF.

How to conserve energy in a wireless sensor network?

Various strategies, such as duty cycle scheduling, EE routing, energy harvesting and EE Medium Access Control can be used to conserve energy in a wireless sensor network . Mobile videos are accountable for the rigorous consumption of energy as they involve the usage of screen display, CPU, audio/video decoder and network connectivity.

How much energy does a BS consume?

In the BS itself, the air interface i.e., radio and power amplifier (PA) consumes approximately 50%, while the digital signal processing consumes approximately 15% of the total energy of the network . The term “Green Cellular Network” has gained huge popularity since the current telecom industry is more cautious about the improvements in EE.



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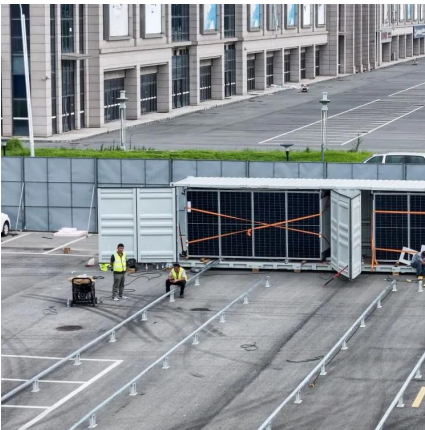
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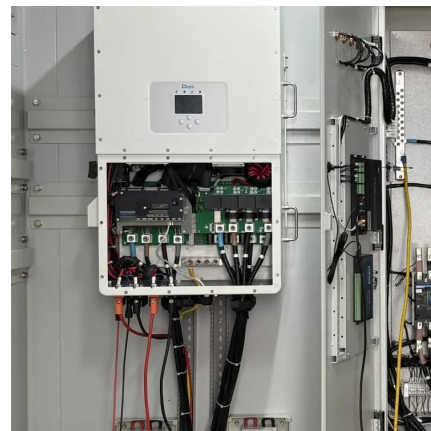
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