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# Myanmar 5G Base Station Power Management System

## Overview

Are 5G base stations a flexible resource for power systems?

The authors declare no conflicts of interest. Abstract 5G base stations (BSs) are potential flexible resources for power systems due to their dynamic adjustable power consumption. However, the ever-increasing energy consumption of 5G BSs place.

Do 5G BSS save energy?

However, the ever-increasing energy consumption of 5G BSs places great pressure on electricity costs, and existing energy-saving measures do not fully utilise BS wireless resources in accordance with dynamic changes in communication load, resulting in flexible resource waste and seriously limiting electricity cost savings for 5G BSs.

What is the work difficulty of 5G network & powering solution?

work difficulty. 1) 5G Network general descriptions, cells 2) Powering solution divided into local powering, remote coverage, and impact on powering strategy, powering and share infrastructures in three different type of 5G network and feeding solutions cases and there will be very technical specifications.

What are the components of a 5G BS?

The basic components of a 5G BS, which are illustrated in Figure 1 [ 20 ], mainly include communication equipment and power supply equipment. In addition, power supporting equipment such as air conditioning, lighting and monitoring equipment should also be installed. Diagram of the typical equipment composition of a 5G BS.

What is the coverage area of 5G high-frequency base stations?

The radius of coverage area of 5G high-frequency base stations will be less than one-tenth of that of 4G base stations, and the coverage area of 5G high-

frequency base stations will be less than one percent of that of 4G base stations. The deployment of macro base stations is difficult and the site resources are not easy to obtain.

What is a 5G BS economic optimisation model?

First, a heterogeneous cellular network (HCN) model is established. Then, a 5G BS economic optimisation model is constructed, which aims at minimising the electricity cost of the BSs and takes the BS and user equipment (UEs) states in the HCN model as constraints to clarify the optimisation objective and constraints for the proposed strategy.

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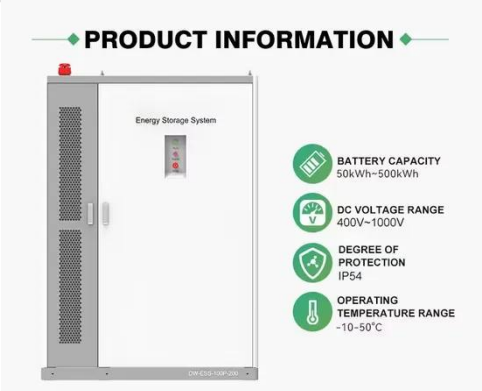


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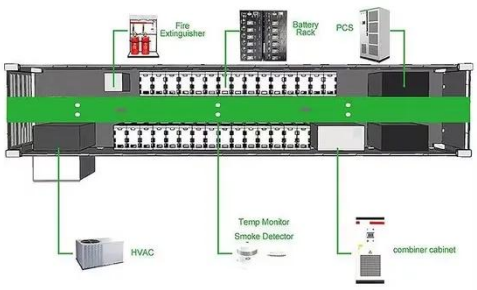


infrastructure?

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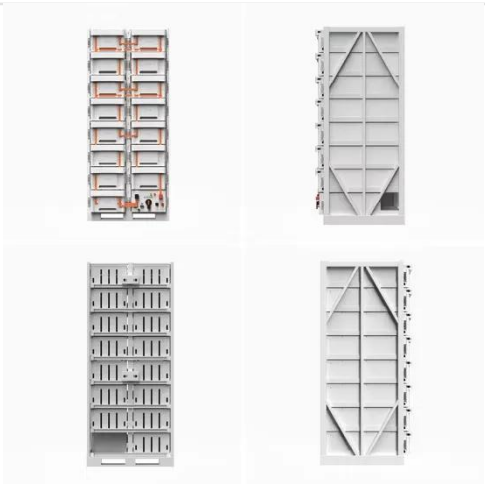

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