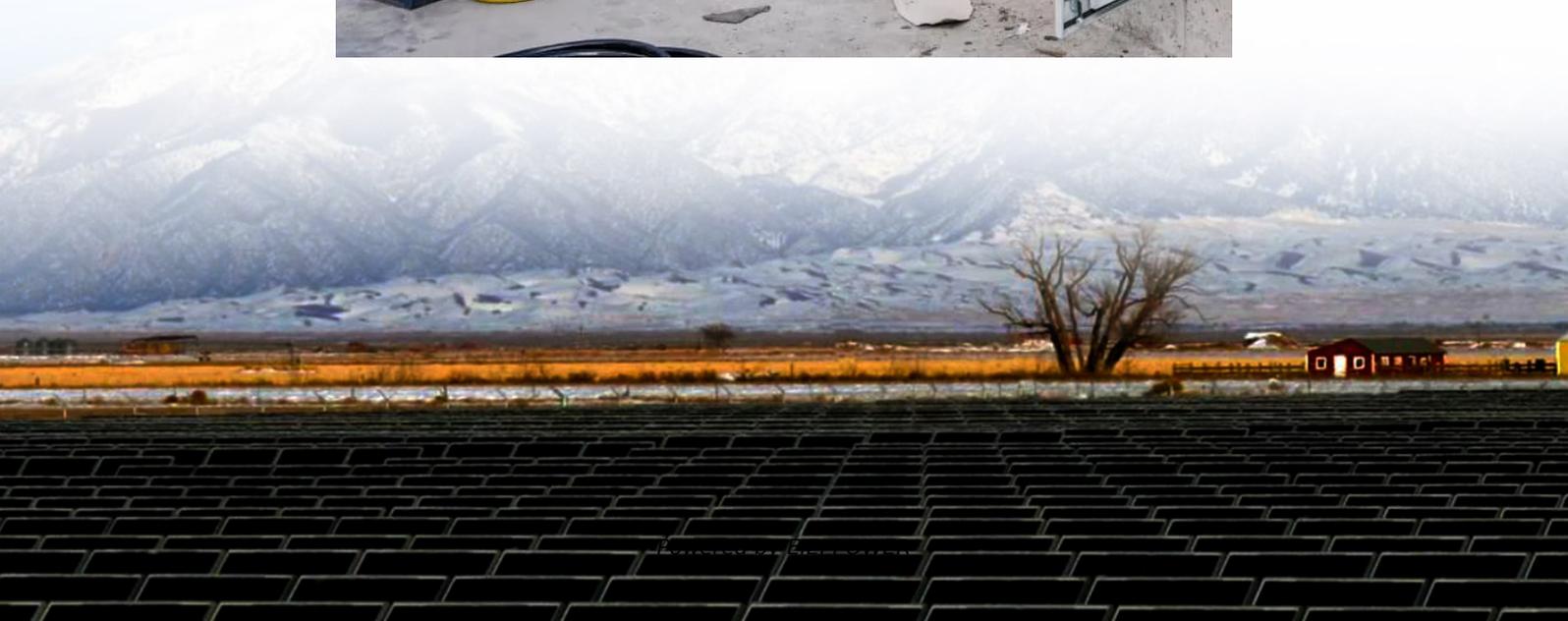


# **China Communications 5G Base Station Energy Method**





## Overview

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What is a 5G base station energy consumption prediction model?

According to the energy consumption characteristics of the base station, a 5G base station energy consumption prediction model based on the LSTM network is constructed to provide data support for the subsequent BSES aggregation and collaborative scheduling.

What is 5G base station load forecasting technology?

The research on 5G base station load forecasting technology can provide base station operators with a reasonable arrangement of energy supply guidance, and realize the energy saving and emission reduction of 5G base stations.

What is a 5G base station energy storage device?

During main power failures, the energy storage device provides emergency power for the communication equipment. A set of 5G base station main communication equipment is generally composed of a baseband BBU unit and multiple RF AAU units. Equation 1 serves as the base station load model:.

How a 5G base station has changed the performance of a base station?

To meet the communication requirements of large capacity and low delay, the commissioning of new equipment has significantly improved the performance of 5G base stations compared with the previous generation base stations. At the same time, the new equipment has altered the power load characteristics of base stations.



## China Communications 5G Base Station Energy Method

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May 15, 2025 · Abstract. In modern wireless communication networks, the effective application of power-saving technologies is crucial for improving energy efficiency and extending the



lifespan ...



### China s communication base station energy methods

As 5G serves as the foundation for the construction of new infrastructure, China, as the world leader in 5G base station construction, has already built over 1.4 million 5G base stations in ...



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There are mainly two method of base station energy saving, which are hardware power saving and software energy saving.



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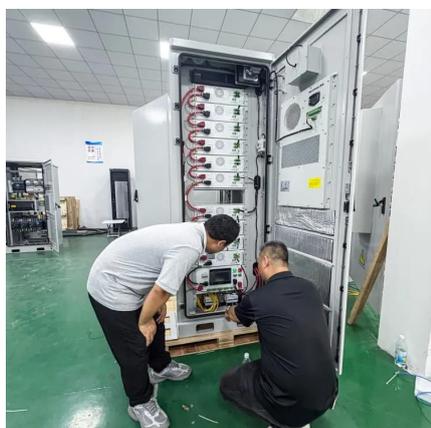


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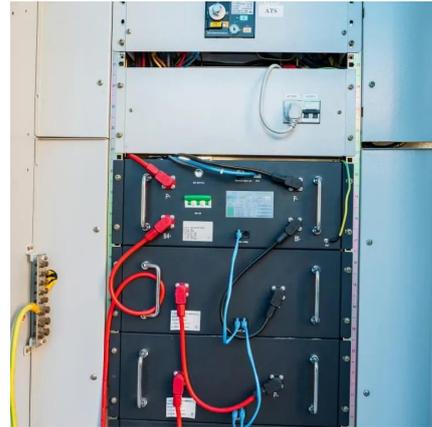
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