

Smart Grid Power Base Station





Overview

Can a power grid model reduce the power consumption of base stations?

The analysis results demonstrate that the proposed model can effectively reduce the power consumption of base stations while mitigating the fluctuation of the power grid load.

How does grid-assisted energy storage reduce the operating cost?

As the number of base station sizes participating in grid-assisted services increases, the greater the scheduling capacity of the energy storage, and the greater the number of incentivized users, the more effective the reduction of the total operating cost will be. Table 6. Economic cost analysis before and after scheduling. 6. Conclusions.

What is a 5G communication base station?

The 5G communication base station can be regarded as a power consumption system that integrates communication, power, and temperature coupling, which is composed of three major pieces of equipment: the communication system, energy storage system, and temperature control system.

What is a base station energy storage system?

A single base station energy storage system is configured with a set of 48 V/400 A-h energy storage batteries. The initial charge state of the batteries is assumed to obey a normal distribution, assuming that the base station has a uniform specification and its parameters are shown in Table 2. Table 2. Parameters of the energy storage system.



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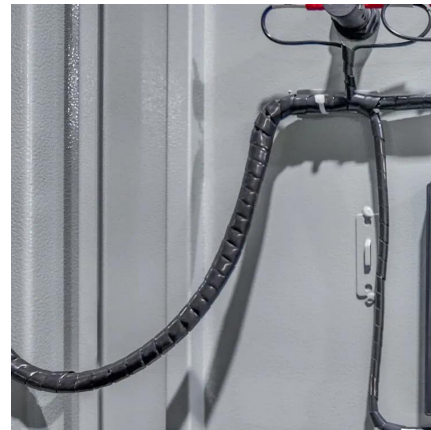


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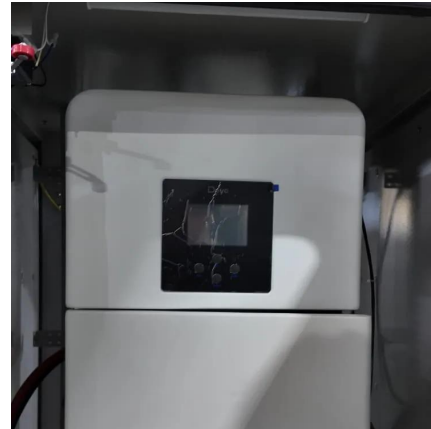


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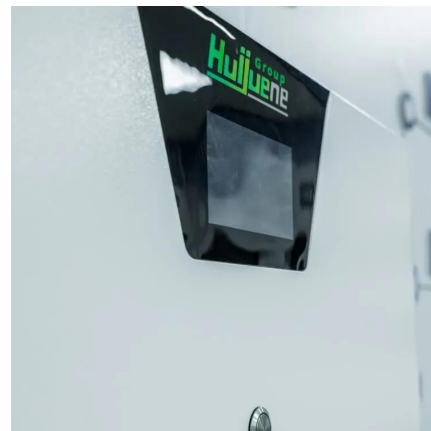
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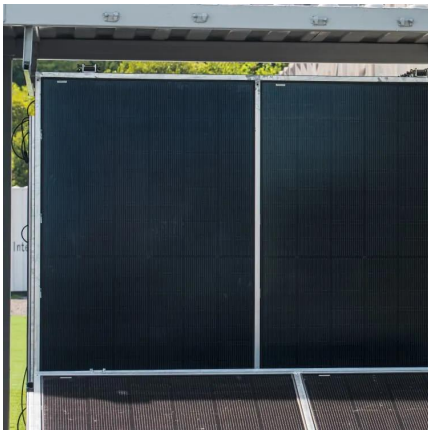
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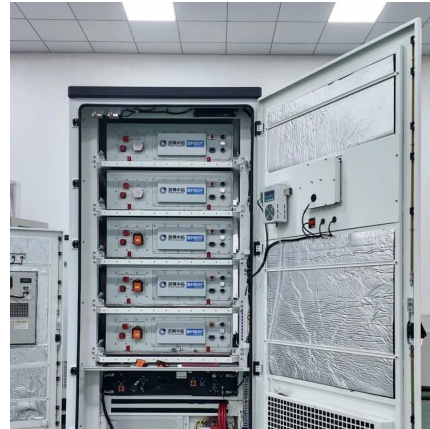
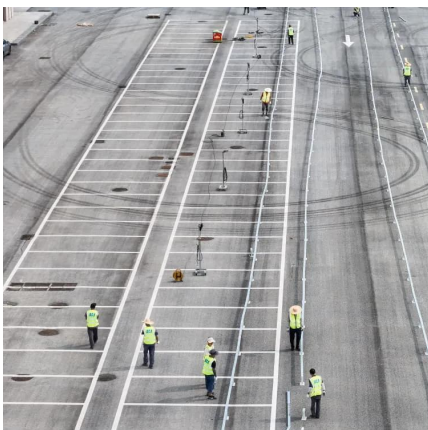
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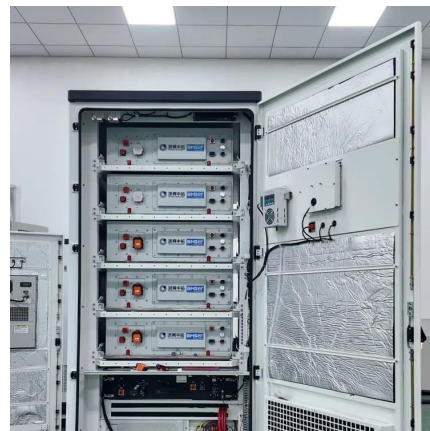
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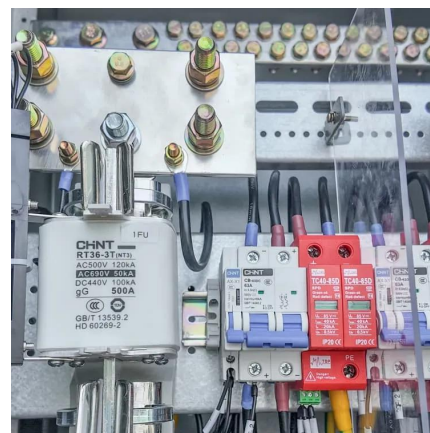
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