

# **5g solar container communication station wind and solar complementary energy storage ESS**





## Overview

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What is the energy storage planning capacity of large-scale 5G BS?

In Case 2, the total optimal energy storage planning capacity of large-scale 5G BSs in commercial, residential, and working areas is 9039.20 kWh, and the corresponding total rated power is 1807.84 kW. The total energy storage planning capacity of large-scale 5G BSs in Case 3 is 7742 kWh, which is 14.35% lower than that of Case 2.

Can shared energy storage system capacity planning and operation be decoupled?

A bi-level optimization framework of capacity planning and operation costs of shared energy storage system and large-scale PV integrated 5G base stations is proposed to realize the decoupling of shared energy storage system capacity planning and operation from 5G base station operation.

Why is SES system dynamic capacity leasing important for PV integrated 5G BS?

Due to the complementarity of energy generation and load demand among different PV integrated 5G BSs, SES operator can aggregate the charging-discharging demands among PV integrated 5G BSs and provide SES system dynamic capacity leasing services, which promotes efficient utilization of PV energy and reduce the operation cost of 5G BSs , .

Why should 5G BS engage in electricity trading with SES system?

Moreover, direct curtailment of surplus PV energy will encounter the PV power curtailment penalty. Therefore, 5G BSs are willing to engage in electricity trading with SES system through leased capacity to reduce operation costs.



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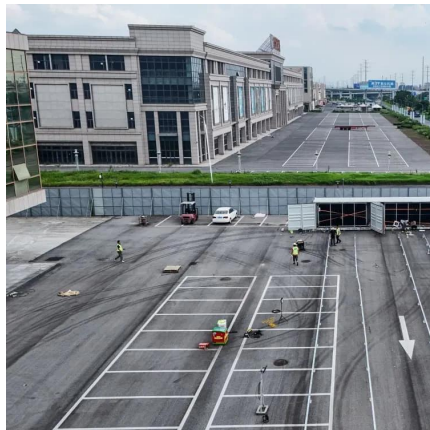
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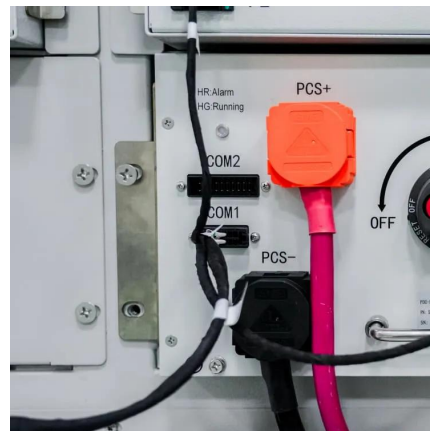


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