



BUHLE POWER

# Off-grid containerized photovoltaic energy storage for base stations





## Overview

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What is a photovoltaic storage microgrid?

Photovoltaic power generation is used as a distributed power source, and the backup power storage and photovoltaic power form a photovoltaic storage system. The photovoltaic storage microgrid structure of the grid-connected 5G base station is shown in Fig. 1. Fig. 1. Microgrid control architecture of a 5G base station.

What happens if a base station does not deploy photovoltaics?

When the base station operator does not invest in the deployment of photovoltaics, the cost comes from the investment in backup energy storage, operation and maintenance, and load power consumption. Energy storage does not participate in grid interaction, and there is no peak-shaving or valley-filling effect.

Does a 5G base station microgrid photovoltaic storage system improve utilization rate?

Access to the 5G base station microgrid photovoltaic storage system based on the energy sharing strategy has a significant effect on improving the utilization rate of the photovoltaics and improving the local digestion of photovoltaic power. The case study presented in this paper was considered the base stations belonging to the same operator.

Do 5G base stations use intelligent photovoltaic storage systems?

Therefore, 5G macro and micro base stations use intelligent photovoltaic storage systems to form a source-load-storage integrated microgrid, which is an effective solution to the energy consumption problem of 5G base stations and promotes energy transformation.



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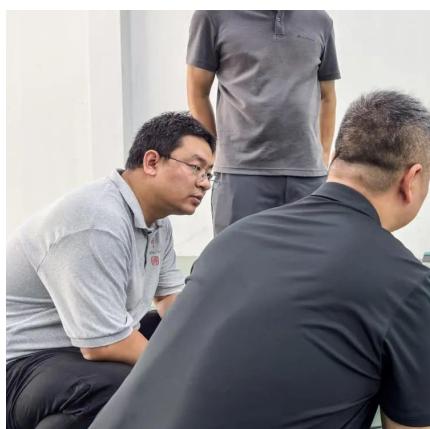
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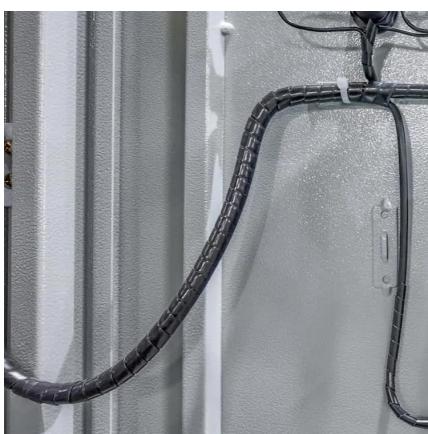
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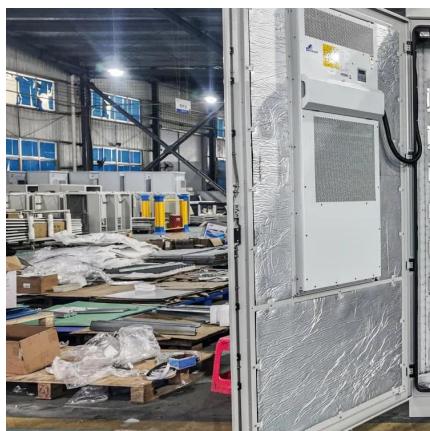
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