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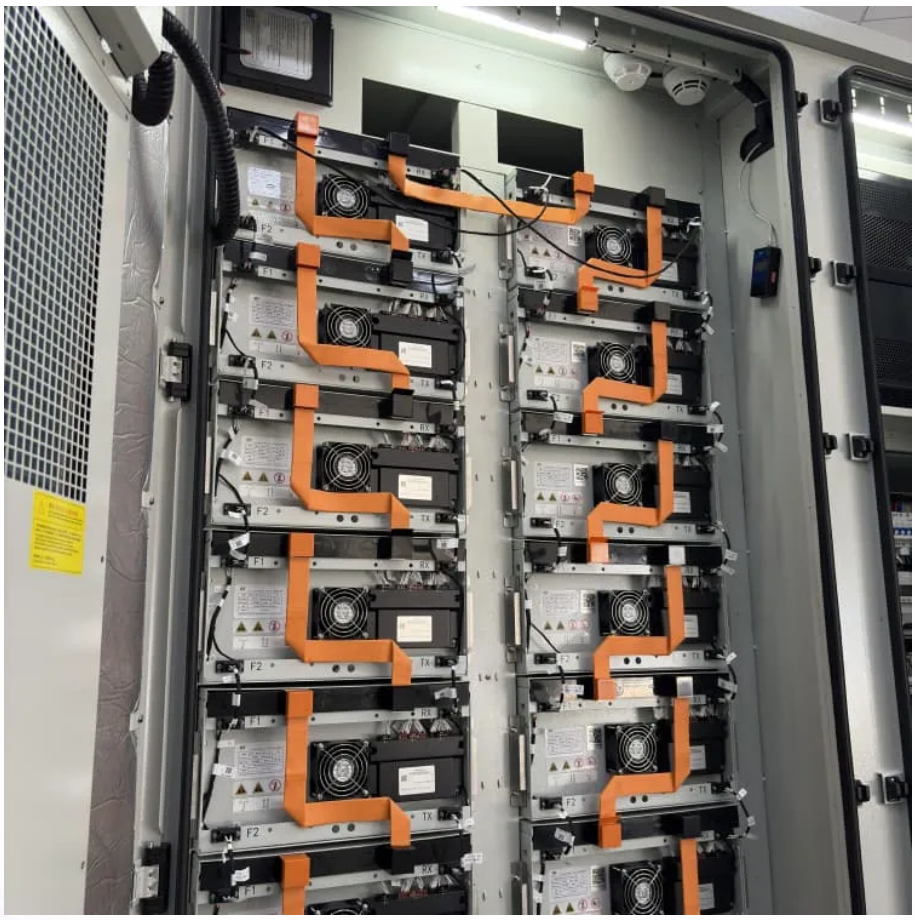
Supercapacitors for 5G base stations



Overview

Does BS load rate affect the power consumption of 5G networks?

the power consumption of AAU nearly linearly increases with the growth of BS load rate, while that of the BBU is quite stable at varying load rates. As the power consumption of 5G BSs is significantly higher than that of 4G BSs, we focus on the backup power allocation of 5G networks in this work.

What is backup power in 5G HetNet?

Especially for the cloud radio access network (C-RAN) scenario with many baseband units (BBUs) pooled together, it is natural and convenient to supply backup power for those BSs all together. The scenario of 5G HetNet consisting of macro and small cells, in which the backup power is supplied by battery groups.

How will 5G be used in the future?

Reprinted, with permission, from ref. In the foreseeable future, 5G networks will be deployed rapidly around the world, in cope with the ever-increasing bandwidth demand in mobile network, emerging low-latency mobile services and potential billions of connections to IoT devices at the network edge .

How dense is 5G compared to 4G?

With shorter signal range compared to that of 4G, the deployment of 5G network is expected to be highly dense. It is estimated that, by 2026 and in China only, over 14 million new and upgraded 5G BSs will be built, with 4.8 million macro BSs and another 9.5 million small ones . □2020 IEEE. Reprinted, with permission, from ref.

Supercapacitors for 5G base stations

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