



BUHLE POWER

Communication high voltage for 5g base station





Overview

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 5G technology has changed the power load characteristics of base stations?

At the same time, the new equipment has altered the power load characteristics of base stations. In the 5G technology framework, the 5G base station comprises macro and micro variants. The micro base station serves indoor blind spots with minimal power consumption. The macro base station exhibits greater potential for demand response.

What is a 5G power supply?

The power supply equipment manages the distribution and conversion of electrical energy among equipment within the 5G base station. During main power failures, the energy storage device provides emergency power for the communication equipment.

Why does 5G communication require a lot of base stations?

5G communication can process large amounts of data at high speed by using high-frequency bands, requiring a lot of base stations because of the use of high frequencies. Compared to 4G LTE, 5G communication base stations have more transmitting antennas and parts with increased power consumption and heat generation.



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Figure 3. A power supply for a 5G macro base station block diagram. Highlighted ICs The MAX15258 is a high voltage multiphase boost controller with an I²C digital interface designed

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, Huijue ...](#)

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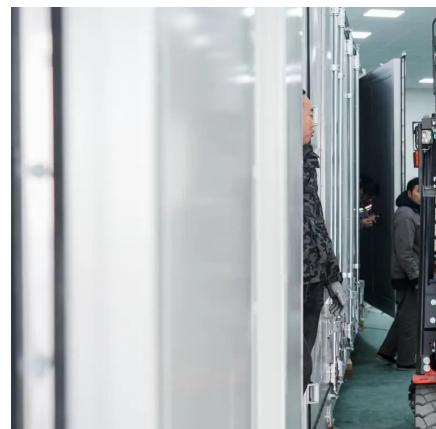


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