

PDEOZE PowerContainer

5G base station small and micro station backup power solution



Overview

What is a small cell in 5G?

Small cells are a new part of the 5G platform that increase network capacity and speed, while also having a lower deployment cost than macrocells. The compact size of a small cell requires that all components – especially power converters – provide high efficiency, better thermals and eventually the best power density possible.

How do small cells fit into the 5G ecosystem?

A cell tower (also called a macrocell) is a huge umbrella used to provide radio signals to thousands of users in large areas with minimal obstructions. To extend the coverage of a macrocell, distributive antenna systems (DASs) are used in conjunction with the cell tower.

How does a small cell base station affect a smartphone's battery life?

When a mobile device is close to a small-cell base station, the power needed to transmit the signal is much lower compared to the power needed to transmit a signal from a cell tower far away, thus extending smartphone battery life.

What is a telecom battery backup system?

A telecom battery backup system is a comprehensive portfolio of energy storage batteries used as backup power for base stations to ensure a reliable and stable power supply. As we are entering the 5G era and the energy consumption of 5G base stations has been substantially increasing, this system is playing a more significant role than ever before.

Are small cells the future of 5G?

The traditional wireless infrastructure approach to 5G has certain limitations, however, including penetration ability and signal reach due to a higher spectrum. That's where small cells come in. Small cells increase the amount of

traffic that can be handled in an area while also increasing speed.

Why do small cells need a 5G antenna?

Increasing the frequency increases the speed of sending/ receiving signals and helps shrink the size of the antenna, which in turn shrinks the size of the cell. Shorter wavelengths result in a decrease in signal penetration and radius, reinforcing the need for small cells. How do small cells fit into the 5G ecosystem?

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