

Title: 5g power-saving base station

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This article identifies energy-saving potential of the fifth generation (5G) Radio Access Network, and describes main energy-saving principles and technologies.

Aiming at minimizing the base station (BS) energy consumption under low and medium load scenarios, the 3GPP recently completed a Release 18 study on energy savi

The traditional power-saving effect evaluation scheme of Active Antenna Unit (AAU) is complicated, leading to errors in the final evaluation results possibly. This paper proposes a ...

This technical report explores how network energy saving technologies that have emerged since the 4G era, such as carrier shutdown, channel shutdown, symbol shutdown etc., can be leveraged to ...

In today's 5G era, the energy efficiency (EE) of cellular base stations is crucial for sustainable communication. Recognizing this, Mobile Network Operators are actively prioritizing EE for both ...

The 5G standard introduces massive MIMO technology. In low base station service load scenarios, such as idle hours at night and non-capacity cell scenarios, it can be considered to turn off the ...

This paper presents an exhaustive review of power-saving research conducted for 5G and beyond 5G networks in recent years, elucidating the advantages, disadvantages, and key ...

To further explore the energy-saving potential of 5 G base stations, this paper proposes an energy-saving operation model for 5 G base stations that incorporates communication caching and ...

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