How to save electricity in base station communication

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 ...

Telecom operators and equipment vendors have developed multiple approaches to improve base station energy efficiency. These range from hardware upgrades to software ...

Various approaches have been proposed to reduce the energy consumption of an RBS, for instance, passive cooling techniques, energy-efficient backhaul solutions, and distributed base ...

Design an energy saving model for cellular base station: the prediction of cellular traffic load on base station is used with a algorithm for managing the power utilization of base station

Abstract: With the maturity and large-scale deployment of 5G technology, the proportion of energy consumption of base stations in the smart grid is increasing, and there is an urgent need to ...

This chapter aims a providing a survey on the Base Stations functions and architectures, their energy consumption at component level, their possible improvements and ...

An effective strategy to reduce this energy consumption in mobile networks is the sleep mode optimization (SMO) of base stations (BSs). In this paper, we propose a novel ...

This article first proposes a dynamic base station switching framework based on deep reinforcement learning (DRL), which optimizes the power consumption of switching BSs.

The amount of energy used by a sensor node has a substantial influence on the lifespan of wireless sensor

networks. Various strategies, such as duty cycle scheduling, EE routing, ...

In this work, we developed static and dynamic base station switch-off methods to minimize energy consumption during low-traffic conditions. Using these base-station switch-off methods, we are ...

Web: https://www.drakoulis.eu