

5g base station synchronous motor





Overview

A significant number of 5G base stations (gNBs) and their backup energy storage systems (BESSs) are redundantly configured, possessing surplus capacity during non-peak traffic hours. Moreover, traffic lo.

Do 5G networks need time synchronization?

Many of the commercial 5G networks going live around the world today use TDD. TDD radio frames inherently require time and phase alignment between radio base stations, to prevent interferences and related loss of traffic. Time synchronization is also required in FDD networks when different radio coordination features are used.

What is 5G synchronization & why is it important?

Proper network synchronization is a prerequisite to excellent radio network performance. Some of the most compelling use cases for 5G, including industrial automation, depend on more accurate timing and will likely generate additional synchronization requirements in the near future.

Does 5G change radio network synchronization requirements?

While the introduction of 5G did not cause any fundamental change to radio network synchronization requirements, some applications may put more stringent local accuracy requirements on the synchronization of the 5G nodes. Examples include time-sensitive networks (TSNs), smart grid applications and the UE device-positioning use case.

Why are small cells a new part of 5G?

The need to increase the number of base stations to provide wider and more dense coverage has led to the creation of small cells. 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.



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