

Liechtenstein 5g outdoor base station design





Overview

Due to the high propagation loss and blockage-sensitive characteristics of millimeter waves (mmWaves), constructing fifth-generation (5G) cellular networks involves deploying ultra-dense base stations (BS).

How to optimize base station deployment in 5G wireless networks?

In previous research on 5 G wireless networks, the optimization of base station deployment primarily relied on human expertise, simulation software, and algorithmic optimization.

Can a 5G base station be made on a fast prototyping tool?

A prototype of 5G base station can be made on the basis of various modules and tools for fast prototyping. Base station types 1-O and 2-O cannot be implemented on fast prototyping tools due to their design features.

Why do we need a 5G base station?

In order to meet the development trend of the fast pace of 5G, improve users' 5G use experience, reduce insufficient signal coverage, and other problems, more base stations need to be established to cope with the high requirements of 5G on the network.

What is the location optimization approach for 5G BS?

The location optimization approach for 5G BSs aims to cover the service demand area with the minimum number of BSs or to maximize the service coverage area of a given number of BSs. To solve this typical coverage problem, an MCLP model was employed for the location optimization of 5G BSs.



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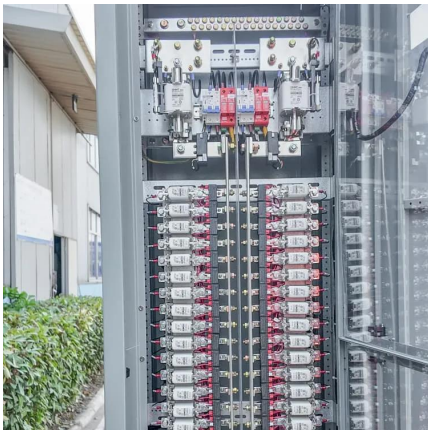
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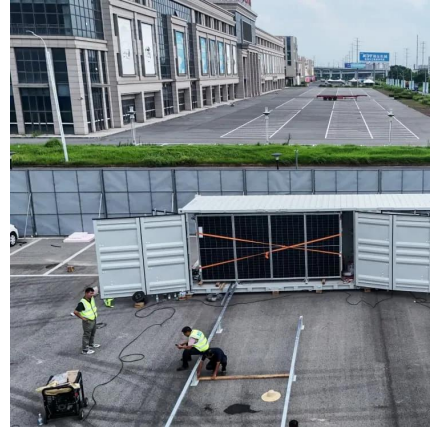
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