

Base station outdoor construction analysis





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).

Why is base station site selection important?

Especially with the development and promotion of national 5G technology, the construction of 5G base stations is an important part of the future communication infrastructure. Therefore, base station site selection will become an important work of base station construction.

What are the constraints of a base station?

- (2) Constraints: Euclidean distance between base stations, whether the base station covers the test point, whether the coverage reaches the standard, etc.
- (3) Output: the specific planning point of the base station, the simulation diagram of the base station coverage test point.

How to choose a base station?

The selection of base stations should comprehensively consider various indicators, such as sharing rate, planning accuracy rate, and planning depth. This is a multi-objective planning problem.

Why are base stations important?

As critical nodes in wireless network connectivity, base stations, if not deployed with foresight and scientific planning, may not only lead to resource wastage, but also cause signal interference, directly affecting network coverage, signal quality, and user experience, thereby increasing the complexity of network management and operational costs.



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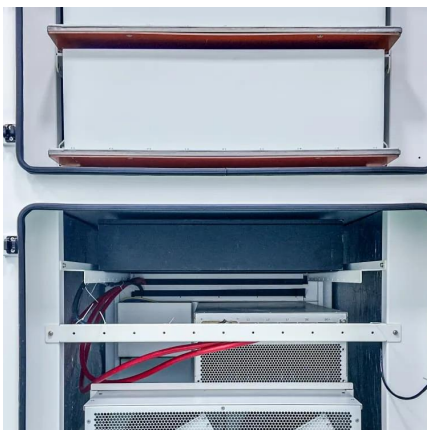


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