

Dominican outdoor base station planning





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 plan a base station?

The base station planning goal is to achieve the signal enhancement effect, so the coverage rate and meet the business volume are the main factors to consider. When establishing the base station, the first consideration is the high coverage rate and the lowest cost of large meet the business volume, so the corresponding planning target function is.

How do outdoor base stations work?

Outdoor base stations integrate all essential systems into a single Integrated Cabinet, designed to endure harsh conditions like direct sunlight, rain, and extreme temperatures. These units protect the equipment while ensuring efficient functionality. Towers are crucial for mounting antennas at high elevations, ensuring wide signal reach.

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.

Can a daqga optimize base station layout?

The use of existing base station locations is considered to reduce construction costs. Moreover, we propose a dynamically adjusted quantum genetic algorithm (DAQGA) to optimize base station layout, with coverage and construction cost as objective functions.



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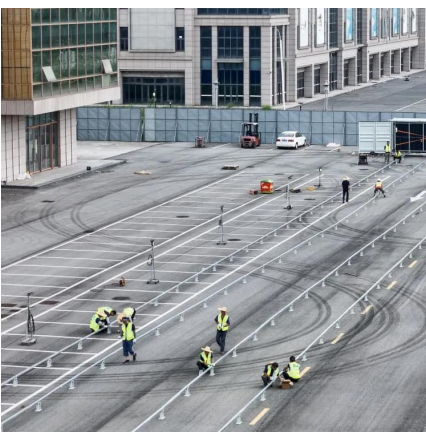


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Embrace the outdoor

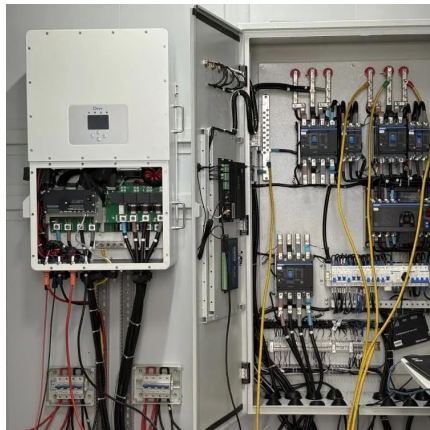
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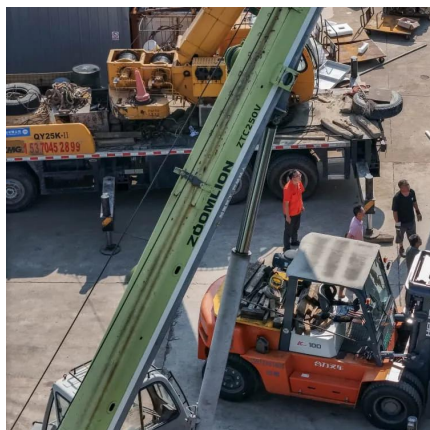


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