

5G small base station looks at three-dimensional communication





Overview

Does 5G base station deployment optimization solve the problems of unreasonable deployment?

To solve the problems of unreasonable deployment and high construction costs caused by the rapid increase of the fifth generation (5 G) base stations, this article proposes a 5 G base station deployment optimization method that considers coverage and cost weights for certain areas in Kowloon, Hong Kong.

Do 5G SBS antenna designs improve performance and compactness?

As networks become more complex and 5G systems require more network coverage, implementing several antenna designs in SBSs presents unique challenges related to performance and compactness. This paper discusses 5G SBS antenna designs that have been proposed recently and studies their characteristics with the parameters that enhance the performance.

Which beamforming technology is used in 5G BSAs?

As mentioned earlier in Section 2, there are two main beamforming technologies, namely analog and digital, used in BSAs for sub-6 GHz. Although the analog beamforming is not true mMIMO, it is still used in some of the 5G base station antennas to form multiple beams. The true mMIMO in sub-6 GHz is achieved through digital beamforming in 5G BSAs.

What is 5 G Technology?

Introduction With the rapid advancement of global communication technologies, fifth generation (5 G) networks have increasingly become the cornerstone of the information age (e.g., [1, 2]). Driven by 5 G technology, there has been an explosive growth in user numbers, which has raised higher demands for base station deployment.



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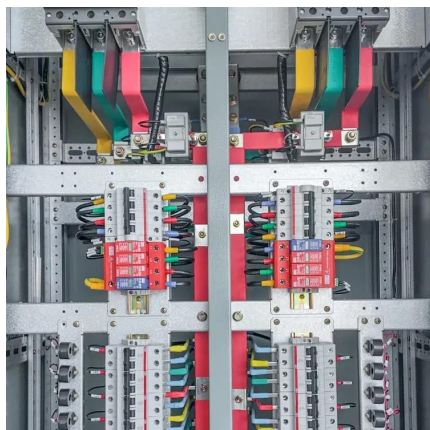


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