

Praia Communication Green Base Station Management Measures





Overview

The emergence of fifth-generation (5G) telecommunication would change modern lives, however, 5G network requires a large number of base stations, which may lead to greater carbon emissions. Sin.

Can a 5G base station promote green development of mobile communication facilities?

However, a significant reduction of ca. 42.8% can be achieved by optimizing the power structure and base station layout strategy and reducing equipment power consumption. Overall, this study provides a clear approach to assess the environmental impact of the 5G base station and will promote the green development of mobile communication facilities.

Are green base stations a problem?

As society grows increasingly more aware of green energy sources, governments also start modifying their power rules to support them. As a result, problems with green base stations became the focus of a significant amount of recent ICT research efforts .

How effective are communication base stations in reducing air pollution?

In Figure 5 A, after implementing optimization measures to communication base stations, the cases of COPDs related to air pollution caused by communication base stations in 2021 would be reduced to 13,004 (65% reduction). The effectiveness of these optimizations becomes more pronounced in the following year.

How do micro-base stations maximize spectral efficiency?

A greedy algorithm is employed to place micro-base stations, maximizing area spectral efficiency. Renewable energy base stations, generating energy from sources like sunlight and wind, are introduced. To optimize renewable energy usage, micro-stations operate in non-adjacent time slices, reducing reliance on the grid.



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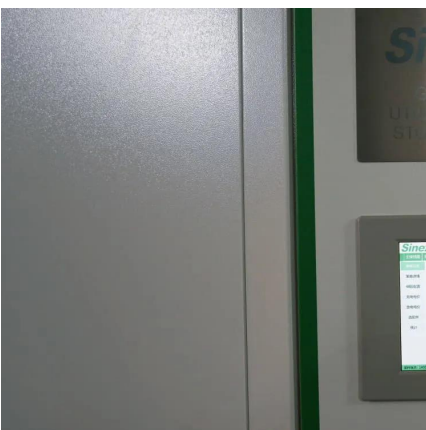
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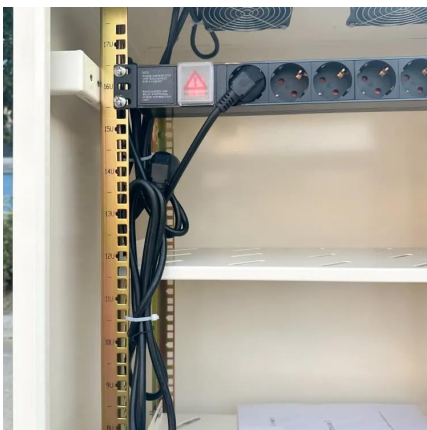
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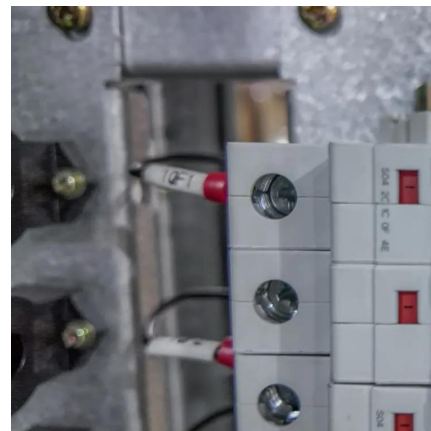


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