

# **The latest design of base station on the roof of communication building**





## Overview

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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.

What are the differences between ground and rooftop base station locations?

Ground base station locations are excluded for special areas like schools, but rooftop base station locations are retained, and height restrictions for ground and rooftop base station towers are established.

How does a base station deployment method optimize the base station layout?

The base station deployment method proposed in this study dynamically optimizes the base station layout based on annual environmental change characteristics.

What is the height of a ground-based base station tower?

Where,  $h_{suf}$  is the height of the ground-based base station tower.  $a$ ,  $b$ , and  $c$  are the linear relationship coefficients of this function. Based on practical considerations, the height of ground-based base station towers ranges from a minimum of 15 meters to a maximum of 40 meters.



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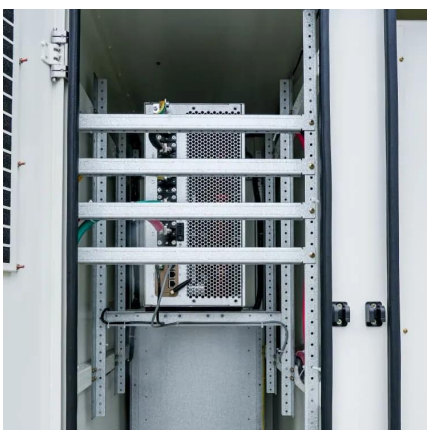
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