

# Communication Engineering Design and Construction Base Station





#### **Overview**

What is a mobile communication base station?

Mobile communication base station is a form of radio station, which refers to a radio transceiver station that transmits information between mobile phone terminals through a mobile communication exchange center in a certain radio coverage area.

Why is construction of mobile communication base stations important?

The construction of mobile communication base stations is an important part of the investment of mobile communication operators, and is generally carried out around factors such as coverage, call quality, investment benefits, construction difficulty, and maintenance convenience.

Why are base stations important in cellular communication?

Base stations are important in the cellular communication as it facilitate seamless communication between mobile devices and the network communication. The demand for efficient data transmission are increased as we are advancing towards new technologies such as 5G and other data intensive applications.

What are the properties of a base station?

Here are some essential properties: Capacity: Capacity of a base station is its capability to handle a given number of simultaneous connections or users. Coverage Area: The coverage area is a base station is that geographical area within which mobile devices can maintain a stable connection with the base station.

What are the components of a base station?

Power Supply: The power source provides the electrical energy to base station elements. It often features auxiliary power supply mechanisms that guarantee operation in case of lost or interrupted electricity, during blackouts. Baseband



Processor: The baseband processor is responsible for the processing of the digital signals.

What is a micro base station?

A micro base station is mostly used in cities with a small coverage distance, generally 1-2 km, and directional coverage. A micro-micro base station is mostly used for blind spot coverage in urban hotspots. Generally, the transmission power is very small and the coverage distance is 500m or less.



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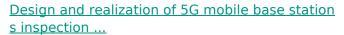
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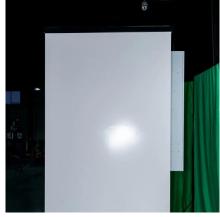


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