

# Base station design for mobile communication system



## Overview

---

Can a multi-beam base station be used in a 5G mobile communication system?

**Abstract:** The fifth-generation (5G) mobile communication system will require the multi-beam base station. By taking into account millimeter wave use, any antenna types such as an array, reflector and dielectric lens antennas are possible for a base station application.

What is a mobile base station?

A mobile base station, also called a base transceiver station (BTS), is a fixed radio transceiver in any mobile communication network or wide area network (WAN). The base station connects mobile devices to the network and routes them to other terminals in the network or to the core network of a mobile operator. [Read more Explore Mobile base.](#)

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.

Can a base station be used for 5G?

Conferences > 2018 IEEE International RF an. The fifth-generation (5G) mobile communication system will require the multi-beam base station. By taking into account millimeter wave use, any antenna types such as an array, reflector and dielectric lens antennas are possible for a base station application.

## Base station design for mobile communication system

---



### Antenna Systems for Cellular Base Stations

Base station antenna systems have undergone a dramatic development within the last decades: in the early days of cellular communications, the cells where more or less of ...

---

### Design and Implementation of Mobile Base Station ...

In modern mobile base stations communication systems, the mobile operators always require much broader bandwidths or need additional operating frequencies to cope the ...



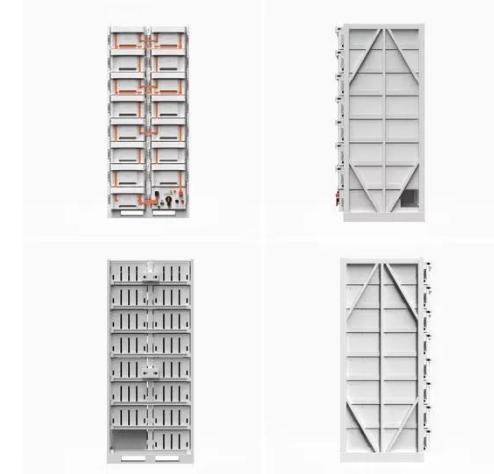
### Design and realization of 5G mobile base station s ...

The research work of this program design has basically reached the expected requirements, through the user requirements analysis, functional design, database design, ...

---

### (PDF) On mobile communications smart base-station system design

A design technique for mobile base-station antennas is presented. Beam tilting to avoid intersymbol interference is considered, and the orthogonal method (OM) under ...



### Optimal location of base stations for cellular mobile network

The location of these events might not cover the large demand. In this paper, we address the classical problem of locating base stations for a mobile cellular network to serve ...

### Base-Station Antenna System Design for 5G/6G Communications

Base-Station Antenna System Design for 5G/6G Communications The fifth/sixth generation (5G/6G) mobile networks support the growth of many applications, such as new ...



### Antenna Systems for Base Station Applications

From the last two decades there is huge advancement in the mobile communications and so as in the antennas for the base stations. This

advancement gives rise ...



## **Base Station Antennas for the 5G Mobile System**

The fifth-generation (5G) mobile communication system will require the multi-beam base station. By taking into account millimeter wave use, any antenna types such as an array, ...



## **Base Stations**

The present-day tele-space is incomplete without the base stations as these constitute an important part of the modern-day scheme ...

## **Base-Station Antenna System Design for ...**

Base-Station Antenna System Design for 5G/6G Communications The fifth/sixth generation (5G/6G) mobile networks ...



## (PDF) On mobile communications smart base ...

A design technique for mobile base-station antennas is presented. Beam tilting to avoid intersymbol interference is considered, ...

## Base Stations

The present-day tele-space is incomplete without the base stations as these constitute an important part of the modern-day scheme of wireless communications. They are ...



## Contact Us

For catalog requests, pricing, or partnerships, please visit:  
<https://www.eqacc.co.za>