

# **Base station communication network technology association**





## Overview

---

What are the standardized energy-saving metrics for a base station?

(1) Energy-saving reward: after choosing a shallower sleep strategy for a base station, the system may save more energy if a deeper sleep mode can be chosen, and in this paper, the standardized energy-saving metrics are defined as (18)  $R_{ie} = E_{SM} - 0 E_{SM} = i E_{SM} - 0 E_{SM} = 3$ .

What is base station dormancy?

In response to the problem of high network energy consumption caused by the dense deployment of SBS, the base station dormancy technique is seen as an effective solution, as it does not require changes to the current network architecture and is relatively simple to implement. This technique was first proposed in the IEEE 802.11b protocol .

How does distributed execution affect base station control?

In the distributed execution phase, each actor network makes decisions independently based only on its own network and observations, and although each actor executes independently, the whole system is able to obtain a better base station control strategy because their strategies are based on the results of global optimization. Fig. 2.

What is adaptive base station sleep strategy?

Adaptive base station sleep strategy Adaptive base station sleep strategy is a strategy that dynamically adjusts the sleep and wake-up states of the base station based on real-time network conditions, user demands, and traffic modes.



## Base station communication network technology association

---



### [Cellular Networks, Base Stations, and 5G RAN ...](#)

Aug 15, 2009 · - Cellular Networks Cellular networks are high-speed, high-capacity voice and data communication networks with enhanced ...

### [Joint User Association and Base Station Switching on/off ...](#)

Mar 19, 2023 · I. INTRODUCTION With the evolution of information and communication technology (ICT), mobile data traffic is forecasted to grow rapidly [1], raising rigorous ...



### [Mobile Communication Network Base Station Deployment ...](#)

Apr 13, 2025 · This paper discusses the site optimization technology of mobile communication network, especially in the aspects of enhancing coverage and optimizing base station layout. ...



### [Cellular Networks, Base Stations, and 5G RAN](#)

Aug 15, 2009 · - Cellular Networks Cellular networks are high-speed, high-capacity voice and data communication networks with enhanced multimedia and seamless roaming capabilities for ...



### [Performance Analysis of Base Station Association Strategies ...](#)

Sep 30, 2021 · A performance analysis of base station (BS) association strategies is conducted in this paper for an industrial fifth generation (5G) network comprising a mobile actuator ...



### [Energy-saving control strategy for ultra-dense network base stations](#)

Aug 1, 2025 · Threshold-based base station sleep strategy is a common base station management method in wireless communication networks, which adjusts the operating state ...



### [Joint Task Allocation, Communication Base Station Association ...](#)

Aug 26, 2024 · A revenue function, combining task sensing utility and task execution costs, is designed, leading to a joint optimization problem of UAV task allocation, communication base ...







### [Base Station Deployment Scheme for Low-Altitude](#)

Dec 29, 2024 · Integrated sensing and communication (ISAC) is a key technology of future fifth-generation-advanced (5G-A) and sixth-generation (6G) mobile communication systems. The ...

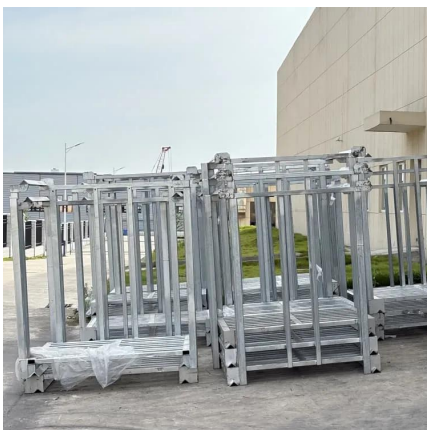
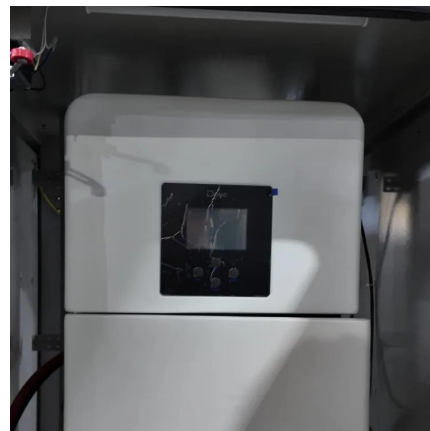


### [A Review of Base Station Navigation Technology for...](#)

Jul 19, 2025 · A prime example is the collaborative application of the Beidou Navigation Satellite System, mobile communication networks, and low-orbit satellite communication systems. In ...

### [Wireless Communication Base Station Location Selection...](#)

Jun 9, 2024 · 1. Introduction Recently, with the rapid development of wireless communication technology, the enhancement of wireless network performance is concerned with meeting the ...



### [NGMN unveils common language for base station antennas...](#)

Dusseldorf, Germany, 09 July 2025 - The procurement, testing and deployment of base station antennas - a critical component in the delivery of mobile communications - will be simpler for ...



## Contact Us

---

For technical specifications, project proposals, or partnership inquiries, please visit:  
<https://www.bukhobuhle.co.za>

### Scan QR Code for More Information



<https://www.bukhobuhle.co.za>